



## Level II Data Validation Report

**To:** Eric Pastor, P.E. **Date:** April 2, 2015  
**From:** Brenda Basile, Ph.D. **File:** USOR Equipment DUS.doc  
**RE:** Review of Equipment Waste Characterization **CC:** Roberta Russell  
Samples Collected March 2015

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PBW reviewed three laboratory reports from ALS Environmental providing the analytical results for waste samples collected by Effective Environmental from March 3, 2015 to March 6, 2015 at the U. S. Oil Recovery (USOR) Superfund site. The reports were reviewed for conformance to the requirements of *SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846)*, *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008)*, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010)*, and the USOR Quality Assurance Project Plan (QAPP) for Site Monitoring and Stabilization (May 2012). The purpose of this sample event was to provide waste characterization data for the disposal of the equipment contents.

Waste samples were analyzed using the following methods:

- SM 4500H+ B – pH Value Electrometric Method
- SW-846 7.3.3.2 Reactive Cyanide
- SW-846 7.3.4.2 Reactive Sulfide
- SW-846 1010 - Test Methods for Flash Point by Pensky-Martens Closed-Cup Tester
- SW-846 1030 – Ignitability of Solids (Burn Rate)
- SW 846 6020A – Inductively Coupled Plasma – Mass Spectrometry
- SW 846 7470A – Mercury in Liquid Waste (Manual Cold Vapor Technique)
- SW-846 8260B - Volatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS)
- SW-846 8270 – Semivolatile Organic Compounds by Gas Chromatography-Mass Spectrometry (GC/MS)
- SW-846 9045B – Soil and Waste pH

Quality control (QC) data were reviewed as described in the QAPP and the results of the review are discussed in this memorandum. ALS Environmental (Houston, Texas) is accredited under Texas certificate T104704231-14-14 for the matrices, methods, and analytes reported in this laboratory report. ALS Environmental (Holland, Michigan) is accredited under Texas certificate T104704494-15-6 for cyanide and sulfide.

### Introduction

Waste and associated QC samples were leached using the toxicity characteristic leaching procedure (TCLP) (SW-846 1311) and analyzed for TCLP volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals using the methods listed above. In addition, samples were analyzed for reactivity (cyanide and sulfide), corrosivity, and ignitability (RCI) using the methods listed above. Table 1 lists the sample identifications cross-referenced to laboratory identifications and the analyses performed for each sample. Other than USOR EQ 1 Heated&Agitated Frac Tank (solid) and USOR EQ 2 Dissolved Air Flotation Tank (solid), samples were analyzed for parameters as listed on the chain-of-custody (C-O-C). USOR EQ 1



Heated&Agitated Frac Tank (solid) and USOR EQ 2 Dissolved Air Flotation Tank (solid), collected on March 4, were cancelled by Effective. The equipment was resampled on March 5. The sample receipt checklist for laboratory report HS15030223 indicates a discrepancy between the bottle labels for USOR-EQ-03 Light Blue Horizontal Cylinder. The correct field identification was USOR-EQ-14-ICP Tank B (solid). The laboratory issued a revised report. No data were qualified due to this field sampling error.

Data qualified due to exceedances of QC criteria are listed in Table 2.

## **QC Results**

### **PRESERVATION AND HOLDING TIMES**

Samples were received at the laboratory at temperatures less than 6°C.

Samples for pH determination are to be "analyzed immediately". Samples were analyzed in the laboratory; all pH data is qualified as estimated (J) due to holding time exceedances. The remaining analyses were performed within method and QAPP holding times.

### **BLANKS**

Analytes detected in field or laboratory quality control blanks are listed in Table 3. Data are qualified if concentrations are less than five times the blank concentration. Data are qualified as shown on Table 2.

### **SURROGATE RECOVERIES AND INTERNAL STANDARD AREAS**

The laboratory flags data using statistically derived control limits as a reference. Surrogate recoveries outside the QAPP acceptance criteria are listed in Table 4. No VOC surrogate recoveries were outside acceptance criteria. SVOC sample data are not qualified if recoveries exceed the QAPP limits and the analyte is not detected. SVOC sample data are qualified as estimated with a low bias (JL) if two or more acid or base-neutral surrogates were below the acceptance criteria. Field sample data are qualified as shown in Tables 2 and 4.

### **LABORATORY CONTROL SAMPLES**

The laboratory flags data using statistically derived control limits as a reference. Laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) (if analyzed) recoveries (%R) outside the QAPP acceptance criteria are listed in Table 4. LCS/LCSD precision (as relative percent difference [RPD]) was within QAPP criteria. Field sample data are qualified as shown in Tables 2 and 4.

### **MATRIX SPIKE/MATRIX SPIKE DUPLICATE**

Batch or non-project sample data were not evaluated. The laboratory flags data using statistically derived control limits as a reference. Matrix spike/matrix spike duplicate (MS/MSD) recoveries (%R) outside the QAPP criteria are listed in Table 4. Sample data are not qualified if recoveries exceed the QAPP limits and the analyte is not detected. Field sample data are qualified as shown in Tables 2 and 4.

The RPD for the reactive cyanide MS/MSD for field sample USOR-EQ-03 L/Blue Horizontal Cylinder was incorrectly calculated. The correct RPD is within QAPP criteria. No data were qualified.

### **FIELD PRECISION**

Field duplicate precision is summarized in Table 5. Waste field duplicate precision is evaluated using 50 relative percent difference or  $\pm$  the method quantitation limit as the criteria. Field duplicate precision outside acceptance criteria are listed in Table 5. Data are qualified as shown on Table 2 and Table 5.



**SUMMARY**

Analytical data are usable for determining concentrations in waste samples collected from equipment at the USOR Site.

**Table 1 Cross-Reference Field Sample Identifications and Laboratory Identifications**

Field Identification	Laboratory Identification	VOCs	SVOCs	Metals	RCI	Comment
USOR-EQ-03 L/Blue Horizontal Cylinder	HS15030132-01	X	X	X	X	Sludge; Reactive cyanide MS/MSD
USOR-EQ-11 Large Blue Hopper	HS15030132-02	X	X	X	X	Solid; SVOC MS; Ignitability duplicate
Equipment Blank #1	HS15030132-03	X	X	X	X	Equipment Blank
Trip Blank	HS15030132-04	X				Trip Blank
USOR-EQ-1 Heated&Agitated Frac Tank	HS15030179-01	X	X	X	X	Liquid; Ignitability duplicate
USOR-EQ-14-ICP Tank B	HS15030179-02	X	X	X	X	Liquid
USOR-EQ-15 Rectangular Mix Tank	HS15030179-03	X	X	X	X	Liquid; Reactive Cyanide MS/MSD
Field Dup #1	HS15030179-04	X	X	X	X	Field duplicate of USOR-EQ-15 Rectangular Mix Tank
Equipment Blank #2	HS15030179-05	X	X	X	X	Equipment Blank
USOR-EQ-13-ICP Tank A	HS15030179-06	X	X	X	X	Solid; pH duplicate
USOR-EQ-15 Rectangular Mix Tank	HS15030179-07	X	X	X	X	Solid
USOR-EQ-12 Rectangular Mix Tank	HS15030179-08	X	X	X	X	Liquid
USOR-EQ-29 Large Rectangular Box	HS15030179-09	X	X	X	X	Liquid
Trip Blank	HS15030179-10	X				Trip Blank
Trip Blank 2	HS15030179-11	X				Trip Blank
Trip Blank 3	HS15030179-12	X				Trip Blank
USOR EQ 1 Heated&Agitated Frac Tank	HS15030179-13					Cancelled
USOR EQ 2 Dissolved Air Flotation Tank	HS15030179-14					Cancelled
USOR-EQ-14-ICP Tank B	HS15030223-01	X	X	X	X	Solid; note incorrect field identification on C-O-C; laboratory corrected field identification
USOR-EQ-01 Heated & Agitated Frac Tank	HS15030223-02	X	X	X	X	Solid; Reactive cyanide MS/MSD
USOR-EQ-02 Dissolved Air Flotation Unit	HS15030223-03	X	X	X	X	Solid
Trip Blank	HS15030223-04	X				Trip Blank
VOCs – Volatile Organic Compounds SVOCs – Semivolatile Organic Compounds RCI – Reactivity, Corrosivity, Ignitability MS/MSD – matrix spike/matrix spike duplicate						



**Table 2 Qualified Data**

Field Identification	Analyte	Qualification	Reason for Qualification
All	pH	J	Holding time exceeded
USOR-EQ-1 Heated&Agitated Frac Tank	Barium	U	Analyte detected in quality control blank
Equipment Blank #1	SVOCs	JL	Surrogate recovery below acceptance criteria
Field Dup #1	Acid SVOCs	JL	Surrogate recovery below acceptance criteria
USOR-EQ-15 Rectangular Mix Tank	Benzene	J	Field duplicate precision
Field Dup #1	Benzene	J	Field duplicate precision
USOR-EQ-15 Rectangular Mix Tank	Chromium	J	Field duplicate precision
Field Dup #1	Chromium	J	Field duplicate precision
Equipment Blank #2	Acid SVOCs	JL	Surrogate recovery below acceptance criteria
USOR-EQ-12 Rectangular Mix Tank	Acid SVOCs	JL	Surrogate recovery below acceptance criteria
USOR-EQ-14-ICP Tank B (liquid)	Barium	U	Analyte detected in quality control blank
USOR-EQ-15 Rectangular Mix Tank (Liquid)	Barium	U	Analyte detected in quality control blank
USOR-EQ-15 Rectangular Mix Tank (Solid)	Barium	U	Analyte detected in quality control blank
USOR-EQ-03 Light Blue Horizontal Cylinder (Solid)	Barium	U	Analyte detected in quality control blank
JL – Data are estimated due to exceedances of one or more quality control criteria; bias likely low U – Analyte not detected at associated reported result			

**Table 3 Blank Detections**

Identification	Analyte	Concentration	Qualified Concentration
Equipment Blank #1	Barium	0.00944 mg/L	0.0472 mg/L
MBLKT1-91155	Barium	0.02855 mg/L	0.143 mg/L
MBLKT1-91289	Barium	0.03256 mg/L	0.162 mg/L
Equipment Blank #2	2-Methylphenol	0.00015 mg/L	0.00075 mg/L
Equipment Blank #2	3&4-Methylphenol	0.00027 mg/L	0.00081 mg/L
Equipment Blank #2	Barium	0.00901 mg/L	0.045 mg/L
Equipment Blank #2	Selenium	0.00108 mg/L	0.0054 mg/L



**Table 4 Precision and Recovery Exceedances**

Sample	Analyte	Spike Recovery	Spike Duplicate Recovery <sup>a</sup>	Precision	Qualification
Equipment Blank #1	2,4,6-Tribromophenol	53.2	NA	NA	JL SVOCs
Equipment Blank #1	2-Fluorobiphenyl	50.8	NA	NA	JL SVOCs
Equipment Blank #1	2-Fluorophenol	54.7	NA	NA	JL SVOCs
Equipment Blank #1	Nitrobenzene-d5	54.6	NA	NA	JL SVOCs
Equipment Blank #1	Phenol-d6	57.8	NA	NA	JL SVOCs
LCS/LCSD-91136	Hexachlorobenzene	63.2	58.4	7.87	None; average > 60
USOR-EQ-14-ICP Tank B (liquid)	2-Fluorophenol	35.7	NA	NA	None; only one low
Field Dup #1	2,4,6-Tribromophenol	58.9	NA	NA	JL Acid SVOCs
Field Dup #1	2-Fluorophenol	41.2	NA	NA	JL Acid SVOCs
Field Dup #1	Phenol-d6	42.1	NA	NA	JL Acid SVOCs
USOR-EQ-12 Rectangular Mix Tank	2,4,6-Tribromophenol	55.7	NA	NA	JL Acid SVOCs
USOR-EQ-12 Rectangular Mix Tank	2-Fluorophenol	46.4	NA	NA	JL Acid SVOCs
USOR-EQ-12 Rectangular Mix Tank	Nitrobenzene-d5	52.5	NA	NA	None; only one base-neutral low
USOR-EQ-12 Rectangular Mix Tank	Phenol-d6	52.7	NA	NA	JL Acid SVOCs
USOR-EQ-29 Large Rectangular Box	2-Fluorophenol	43.9	NA	NA	None; only one low
Equipment Blank #2	2,4,6-Tribromophenol	55.7	NA	NA	JL Acid SVOCs
Equipment Blank #2	2-Fluorobiphenyl	56.2	NA	NA	None; only one base-neutral low
Equipment Blank #2	2-Fluorophenol	55.3	NA	NA	JL Acid SVOCs
USOR-EQ-13-ICP Tank A	2-Fluorophenol	53.5	NA	NA	None; only one low

Base/neutrals: 2,4-dinitrotoluene, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, nitrobenzene, pyridine  
 Acids: 2,4,5-Trichlorophenol, 2,4,6-trichlorophenol, cresols (total), pentachlorophenol

**Table 5 Field Precision**

Field Identification	Analyte	Sample Result	Duplicate Result	RPD	Qualification
USOR-EQ-15 Rectangular Mix Tank / Field Dup #1	2-Butanone	1.7	1.9	11	A
	Benzene	0.35	0.074	130	J
	Trichloroethene	0.026	< 0.010	NA	A
	Cresols, Total	3.9	2.8	33	A
	Arsenic	0.0212	0.0166	24	A
	Barium	0.140	< 0.0450	NA	A
	Chromium	0.2850	1.88	147	J
	Selenium	0.0113	0.0236	70	A (MQL)

RPD = ((SR - DR)\*200) / (SR + DR)  
 A – Acceptable  
 J – Estimated  
 MQL – Method quantiation limit (reporting limit)  
 NA – Not applicable



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March 12, 2015

Hiren Shah  
Effective Environmental Inc.  
9950 Chemical Road  
Pasadena, TX 77507

Work Order: **HS15030132**

Laboratory Results for: **USOR Equ Assessment and Sampling 8181**

Dear Hiren,

ALS Environmental received 4 sample(s) on Mar 04, 2015 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dane W'.

Generated By: Jumoke.Lawal  
Dane J. Wacasey

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030132

**SAMPLE SUMMARY**

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Sludge		03-Mar-2015 16:02	04-Mar-2015 13:45	<input type="checkbox"/>
HS15030132-02	USOR-EQ-11-Large Blue Hopper	Solid		03-Mar-2015 16:16	04-Mar-2015 13:45	<input type="checkbox"/>
HS15030132-03	Equipment Blank # 1	Liquid		03-Mar-2015 16:30	04-Mar-2015 13:45	<input type="checkbox"/>
HS15030132-04	TRIP BLANK	Water		03-Mar-2015 00:00	04-Mar-2015 13:45	<input type="checkbox"/>

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030132

**CASE NARRATIVE****Work Order Comments**

- Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.  
The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.
- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.

**GCMS Semivolatiles by Method SW1311/8270****Batch ID: 91156**

Sample ID: HS15030132-01

Sample ID: HS15030132-02

- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

**GCMS Semivolatiles by Method SW8270****Batch ID: 91136**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**GCMS Volatiles by Method SW1311/8260B****Batch ID: R250809**

Sample ID: VSTD050

- 2-Butanone exceeded %D limits for CCV. Samples are ND for this compound.

Sample ID: HS15030194-13MS

- MS and MSD are for an unrelated sample

**Batch ID: R250903**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**GCMS Volatiles by Method SW8260****Batch ID: R250657**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Batch ID: R250803**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW1311/6020****Batch ID: 91155**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW7470****Batch ID: 91117,91298**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW6020****Batch ID: 91106**

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**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030132

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**CASE NARRATIVE**

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**Metals by Method SW6020**

**Batch ID: 91106**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
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**WetChemistry by Method SW1010**

**Batch ID: R250865**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SW9045B**

**Batch ID: R250705**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SM4500H+ B**

**Batch ID: R250666**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SW1030**

**Batch ID: R250633**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-03 L/Blue Horizontal Cylinder  
 Collection Date: 03-Mar-2015 16:02

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-01  
 Matrix:Sludge

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>	Method:SW1311/8260B		Leache:SW1311 / 05-Mar-2015		Prep:SW1311 / 05-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	10-Mar-2015 17:58
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	10-Mar-2015 17:58
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	10-Mar-2015 17:58
<b>2-Butanone</b>	<b>0.14</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	10-Mar-2015 17:58
<b>Benzene</b>	<b>0.15</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 17:58
Carbon tetrachloride	U		0.012	0.10	mg/L	20	10-Mar-2015 17:58
Chlorobenzene	U		0.0080	0.10	mg/L	20	10-Mar-2015 17:58
Chloroform	U		0.012	0.10	mg/L	20	10-Mar-2015 17:58
<b>Tetrachloroethene</b>	<b>0.016</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 17:58
Trichloroethene	U		0.010	0.10	mg/L	20	10-Mar-2015 17:58
Vinyl chloride	U		0.0080	0.040	mg/L	20	10-Mar-2015 17:58
<i>Surr: 1,2-Dichloroethane-d4</i>	93.2			70-125	%REC	20	10-Mar-2015 17:58
<i>Surr: 4-Bromofluorobenzene</i>	101			72-125	%REC	20	10-Mar-2015 17:58
<i>Surr: Dibromofluoromethane</i>	99.4			71-125	%REC	20	10-Mar-2015 17:58
<i>Surr: Toluene-d8</i>	96.7			75-125	%REC	20	10-Mar-2015 17:58
<b>TCLP SEMIVOLATILES</b>	Method:SW1311/8270		Leache:SW1311 / 05-Mar-2015		Prep:SW3510 / 06-Mar-2015		Analyst: GEY
2,4,5-Trichlorophenol	U		0.045	0.25	mg/L	10	09-Mar-2015 14:45
2,4,6-Trichlorophenol	U		0.070	0.25	mg/L	10	09-Mar-2015 14:45
2,4-Dinitrotoluene	U		0.050	0.25	mg/L	10	09-Mar-2015 14:45
Cresols, Total	U		0.10	0.75	mg/L	10	09-Mar-2015 14:45
Hexachlorobenzene	U		0.055	0.25	mg/L	10	09-Mar-2015 14:45
Hexachlorobutadiene	U		0.055	0.25	mg/L	10	09-Mar-2015 14:45
Hexachloroethane	U		0.050	0.25	mg/L	10	09-Mar-2015 14:45
Nitrobenzene	U		0.040	0.25	mg/L	10	09-Mar-2015 14:45
Pentachlorophenol	U		0.080	0.25	mg/L	10	09-Mar-2015 14:45
Pyridine	U		0.10	0.25	mg/L	10	09-Mar-2015 14:45
<i>Surr: 2,4,6-Tribromophenol</i>	70.6	J		39-153	%REC	10	09-Mar-2015 14:45
<i>Surr: 2-Fluorobiphenyl</i>	85.3	J		40-147	%REC	10	09-Mar-2015 14:45
<i>Surr: 2-Fluorophenol</i>	83.8	J		21-110	%REC	10	09-Mar-2015 14:45
<i>Surr: 4-Terphenyl-d14</i>	87.7	J		39-141	%REC	10	09-Mar-2015 14:45
<i>Surr: Nitrobenzene-d5</i>	75.1	J		37-140	%REC	10	09-Mar-2015 14:45
<i>Surr: Phenol-d6</i>	83.6	J		11-110	%REC	10	09-Mar-2015 14:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-03 L/Blue Horizontal Cylinder  
 Collection Date: 03-Mar-2015 16:02

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-01  
 Matrix:Sludge

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW1311 / 05-Mar-2015	Prep:SW3010A / 06-Mar-2015		Analyst: JDE
Arsenic	U		0.0100	0.0500	mg/L	1	10-Mar-2015 16:01
<b>Barium</b>	<b>0.166</b>	J	<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	10-Mar-2015 16:01
Cadmium	U		0.00800	0.0500	mg/L	1	10-Mar-2015 16:01
<b>Chromium</b>	<b>0.0404</b>	J	<b>0.0100</b>	<b>0.0500</b>	<b>mg/L</b>	1	10-Mar-2015 16:01
<b>Lead</b>	<b>0.0120</b>	J	<b>0.00700</b>	<b>0.0500</b>	<b>mg/L</b>	1	10-Mar-2015 16:01
Selenium	U		0.0100	0.0500	mg/L	1	10-Mar-2015 16:01
Silver	U		0.00800	0.0500	mg/L	1	10-Mar-2015 16:01
<b>IGNITABILITY</b>		<b>Method:SW1010</b>					Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW7470 / 11-Mar-2015	Prep:SW7470 / 11-Mar-2015		Analyst: OFO
Mercury	<b>0.000585</b>		<b>0.0000420</b>	<b>0.000200</b>	<b>mg/L</b>	1	11-Mar-2015 13:36
<b>PH BY SM4500H+ B</b>		<b>Method:SM4500H+ B</b>					Analyst: JHD
pH	<b>9.35</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	05-Mar-2015 16:15
Temp Deg C @pH	<b>22.1</b>	H	<b>0</b>	<b>0</b>	<b>°C</b>	1	05-Mar-2015 16:15
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 12:00
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-11-Large Blue Hopper  
 Collection Date: 03-Mar-2015 16:16

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-02  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 05-Mar-2015	Prep:SW1311 / 05-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	09-Mar-2015 22:09
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	09-Mar-2015 22:09
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	09-Mar-2015 22:09
2-Butanone	U		0.020	0.20	mg/L	20	09-Mar-2015 22:09
Benzene	U		0.012	0.10	mg/L	20	09-Mar-2015 22:09
Carbon tetrachloride	U		0.012	0.10	mg/L	20	09-Mar-2015 22:09
Chlorobenzene	U		0.0080	0.10	mg/L	20	09-Mar-2015 22:09
Chloroform	U		0.012	0.10	mg/L	20	09-Mar-2015 22:09
Tetrachloroethene	U		0.012	0.10	mg/L	20	09-Mar-2015 22:09
Trichloroethene	U		0.010	0.10	mg/L	20	09-Mar-2015 22:09
Vinyl chloride	U		0.0080	0.040	mg/L	20	09-Mar-2015 22:09
Surr: 1,2-Dichloroethane-d4	104			70-125	%REC	20	09-Mar-2015 22:09
Surr: 4-Bromofluorobenzene	96.9			72-125	%REC	20	09-Mar-2015 22:09
Surr: Dibromofluoromethane	102			71-125	%REC	20	09-Mar-2015 22:09
Surr: Toluene-d8	107			75-125	%REC	20	09-Mar-2015 22:09
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 05-Mar-2015	Prep:SW3510 / 06-Mar-2015		Analyst: GEY
2,4,5-Trichlorophenol	U		0.014	0.075	mg/L	10	06-Mar-2015 18:00
2,4,6-Trichlorophenol	U		0.021	0.075	mg/L	10	06-Mar-2015 18:00
2,4-Dinitrotoluene	U		0.015	0.075	mg/L	10	06-Mar-2015 18:00
<b>Cresols, Total</b>	<b>0.16</b>	<b>J</b>	<b>0.030</b>	<b>0.22</b>	<b>mg/L</b>	10	06-Mar-2015 18:00
Hexachlorobenzene	U		0.016	0.075	mg/L	10	06-Mar-2015 18:00
Hexachlorobutadiene	U		0.016	0.075	mg/L	10	06-Mar-2015 18:00
Hexachloroethane	U		0.015	0.075	mg/L	10	06-Mar-2015 18:00
Nitrobenzene	U		0.012	0.075	mg/L	10	06-Mar-2015 18:00
Pentachlorophenol	U		0.024	0.075	mg/L	10	06-Mar-2015 18:00
Pyridine	U		0.030	0.075	mg/L	10	06-Mar-2015 18:00
Surr: 2,4,6-Tribromophenol	66.3	J		39-153	%REC	10	06-Mar-2015 18:00
Surr: 2-Fluorobiphenyl	63.3	J		40-147	%REC	10	06-Mar-2015 18:00
Surr: 2-Fluorophenol	83.4			21-110	%REC	10	06-Mar-2015 18:00
Surr: 4-Terphenyl-d14	81.9			39-141	%REC	10	06-Mar-2015 18:00
Surr: Nitrobenzene-d5	87.7			37-140	%REC	10	06-Mar-2015 18:00
Surr: Phenol-d6	98.7			11-110	%REC	10	06-Mar-2015 18:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-11-Large Blue Hopper  
 Collection Date: 03-Mar-2015 16:16

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-02  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW1311/6020 / 09-Mar-2015	Prep:SW3010A / 06-Mar-2015		Analyst: JCJ
Arsenic		U	0.0100	0.0500	mg/L	1	09-Mar-2015 16:44
<b>Barium</b>	<b>0.552</b>		<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	09-Mar-2015 16:44
Cadmium		U	0.00800	0.0500	mg/L	1	09-Mar-2015 16:44
Chromium		U	0.0100	0.0500	mg/L	1	09-Mar-2015 16:44
Lead		U	0.00700	0.0500	mg/L	1	09-Mar-2015 16:44
Selenium		U	0.0100	0.0500	mg/L	1	09-Mar-2015 16:44
Silver		U	0.00800	0.0500	mg/L	1	09-Mar-2015 16:44
<b>BURN RATE BY METHOD SW1030</b>		<b>Method:SW1030</b>					Analyst: KAH
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	05-Mar-2015 15:00
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW3010A / 06-Mar-2015	Prep:SW7470 / 11-Mar-2015		Analyst: OFO
<b>Mercury</b>	<b>0.0000640</b>	J	<b>0.0000420</b>	<b>0.000200</b>	<b>mg/L</b>	1	11-Mar-2015 13:38
<b>PH SOIL BY SW9045D</b>		<b>Method:SW9045B</b>					Analyst: JHD
<b>pH</b>	<b>8.40</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	06-Mar-2015 15:43
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 12:00
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide		U	100	100	mg/Kg	1	08-Mar-2015 16:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Equipment Blank # 1  
 Collection Date: 03-Mar-2015 16:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-03  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>			<b>Method:SW8260</b>				Analyst: PC
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	09-Mar-2015 18:49
2-Butanone	U		0.00050	0.0020	mg/L	1	09-Mar-2015 18:49
Benzene	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	09-Mar-2015 18:49
Chlorobenzene	U		0.00030	0.0010	mg/L	1	09-Mar-2015 18:49
Chloroform	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	09-Mar-2015 18:49
Trichloroethene	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
Vinyl chloride	U		0.00020	0.0010	mg/L	1	09-Mar-2015 18:49
Surr: 1,2-Dichloroethane-d4	105			71-125	%REC	1	09-Mar-2015 18:49
Surr: 4-Bromofluorobenzene	96.4			70-125	%REC	1	09-Mar-2015 18:49
Surr: Dibromofluoromethane	98.6			74-125	%REC	1	09-Mar-2015 18:49
Surr: Toluene-d8	106			75-125	%REC	1	09-Mar-2015 18:49
<b>LOW-LEVEL SEMIVOLATILES</b>			<b>Method:SW8270</b>			Prep:SW3510 / 05-Mar-2015	Analyst: LG
2,4,5-Trichlorophenol	U		0.000038	0.00020	mg/L	1	05-Mar-2015 21:39
2,4,6-Trichlorophenol	U		0.000032	0.00020	mg/L	1	05-Mar-2015 21:39
2,4-Dinitrotoluene	U		0.000039	0.00020	mg/L	1	05-Mar-2015 21:39
2-Methylphenol	U		0.000041	0.00020	mg/L	1	05-Mar-2015 21:39
3&4-Methylphenol	U		0.000030	0.00020	mg/L	1	05-Mar-2015 21:39
Hexachlorobenzene	U		0.000039	0.00020	mg/L	1	05-Mar-2015 21:39
Hexachlorobutadiene	U		0.000032	0.00020	mg/L	1	05-Mar-2015 21:39
Hexachloroethane	U		0.000044	0.00020	mg/L	1	05-Mar-2015 21:39
Nitrobenzene	U		0.000033	0.00020	mg/L	1	05-Mar-2015 21:39
Pentachlorophenol	U		0.000053	0.00020	mg/L	1	05-Mar-2015 21:39
Pyridine	U		0.000040	0.0010	mg/L	1	05-Mar-2015 21:39
Surr: 2,4,6-Tribromophenol	53.2			34-129	%REC	1	05-Mar-2015 21:39
Surr: 2-Fluorobiphenyl	50.8			40-125	%REC	1	05-Mar-2015 21:39
Surr: 2-Fluorophenol	54.7			20-120	%REC	1	05-Mar-2015 21:39
Surr: 4-Terphenyl-d14	79.8			40-135	%REC	1	05-Mar-2015 21:39
Surr: Nitrobenzene-d5	54.6			41-120	%REC	1	05-Mar-2015 21:39
Surr: Phenol-d6	57.8			20-120	%REC	1	05-Mar-2015 21:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Equipment Blank # 1  
 Collection Date: 03-Mar-2015 16:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-03  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>ICP-MS METALS BY SW6020A</b>		<b>Method:SW6020</b>			Prep:SW3010A / 05-Mar-2015		Analyst: JDE
Arsenic		U	0.00100	0.00500	mg/L	1	06-Mar-2015 19:04
<b>Barium</b>	<b>0.00944</b>		<b>0.000900</b>	<b>0.00500</b>	<b>mg/L</b>	1	06-Mar-2015 19:04
Cadmium		U	0.000800	0.00200	mg/L	1	06-Mar-2015 19:04
Chromium		U	0.00100	0.00500	mg/L	1	06-Mar-2015 19:04
Lead		U	0.000700	0.00500	mg/L	1	06-Mar-2015 19:04
Selenium		U	0.00100	0.00500	mg/L	1	06-Mar-2015 19:04
Silver		U	0.000800	0.00500	mg/L	1	06-Mar-2015 19:04
<b>IGNITABILITY</b>		<b>Method:SW1010</b>					Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>MERCURY BY SW7470A</b>		<b>Method:SW7470</b>			Prep:SW7470 / 05-Mar-2015		Analyst: OFO
Mercury		U	0.0000400	0.000200	mg/L	1	05-Mar-2015 13:09
<b>PH BY SM4500H+ B</b>		<b>Method:SM4500H+ B</b>					Analyst: JHD
pH	6.27	H	0.100	0.100	pH Units	1	05-Mar-2015 16:15
Temp Deg C @pH	23.3	H	0	0	°C	1	05-Mar-2015 16:15
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 12:00
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide		U	100	100	mg/Kg	1	09-Mar-2015 12:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: TRIP BLANK  
 Collection Date: 03-Mar-2015 00:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030132  
 Lab ID:HS15030132-04  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>		<b>Method:SW8260</b>					Analyst: AKP
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	06-Mar-2015 01:58
2-Butanone	U		0.00050	0.0020	mg/L	1	06-Mar-2015 01:58
Benzene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	06-Mar-2015 01:58
Chlorobenzene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 01:58
Chloroform	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 01:58
Trichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
Vinyl chloride	U		0.00020	0.0010	mg/L	1	06-Mar-2015 01:58
Surr: 1,2-Dichloroethane-d4	101			71-125	%REC	1	06-Mar-2015 01:58
Surr: 4-Bromofluorobenzene	96.4			70-125	%REC	1	06-Mar-2015 01:58
Surr: Dibromofluoromethane	101			74-125	%REC	1	06-Mar-2015 01:58
Surr: Toluene-d8	105			75-125	%REC	1	06-Mar-2015 01:58

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> 91106	<b>Test Name :</b> ICP-MS METALS BY SW6020A		<b>Matrix:</b> Liquid			
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30		05 Mar 2015 09:57	06 Mar 2015 19:04	1
<b>Batch ID</b> 91117	<b>Test Name :</b> MERCURY BY SW7470A		<b>Matrix:</b> Liquid			
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30		05 Mar 2015 10:11	05 Mar 2015 13:09	1
<b>Batch ID</b> 91136	<b>Test Name :</b> LOW-LEVEL SEMIVOLATILES		<b>Matrix:</b> Liquid			
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30		05 Mar 2015 13:41	05 Mar 2015 21:39	1
<b>Batch ID</b> 91155	<b>Test Name :</b> TCLP METALS BY SW6020A		<b>Matrix:</b> Solid			
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16	05 Mar 2015 15:30	06 Mar 2015 11:15	09 Mar 2015 16:44	1
<b>Batch ID</b> 91155	<b>Test Name :</b> TCLP METALS BY SW6020A		<b>Matrix:</b> Sludge			
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02	05 Mar 2015 15:30	06 Mar 2015 11:15	10 Mar 2015 16:01	1
<b>Batch ID</b> 91156	<b>Test Name :</b> TCLP SEMIVOLATILES		<b>Matrix:</b> Solid			
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16	05 Mar 2015 15:30	06 Mar 2015 12:10	06 Mar 2015 18:00	10
<b>Batch ID</b> 91156	<b>Test Name :</b> TCLP SEMIVOLATILES		<b>Matrix:</b> Sludge			
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02	05 Mar 2015 15:30	06 Mar 2015 12:10	09 Mar 2015 14:45	10
<b>Batch ID</b> 91298	<b>Test Name :</b> TCLP MERCURY BY SW7470A		<b>Matrix:</b> Solid			
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16		11 Mar 2015 10:04	11 Mar 2015 13:38	1
<b>Batch ID</b> 91298	<b>Test Name :</b> TCLP MERCURY BY SW7470A		<b>Matrix:</b> Sludge			
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02		11 Mar 2015 10:04	11 Mar 2015 13:36	1
<b>Batch ID</b> R250633	<b>Test Name :</b> BURN RATE BY METHOD SW1030		<b>Matrix:</b> Solid			
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			05 Mar 2015 15:00	1
<b>Batch ID</b> R250657	<b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C		<b>Matrix:</b> Water			
HS15030132-04	TRIP BLANK	03 Mar 2015 00:00			06 Mar 2015 01:58	1
<b>Batch ID</b> R250666	<b>Test Name :</b> PH BY SM4500H+ B		<b>Matrix:</b> Liquid			
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			05 Mar 2015 16:15	1
<b>Batch ID</b> R250666	<b>Test Name :</b> PH BY SM4500H+ B		<b>Matrix:</b> Sludge			
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			05 Mar 2015 16:15	1
<b>Batch ID</b> R250705	<b>Test Name :</b> PH SOIL BY SW9045D		<b>Matrix:</b> Solid			
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			06 Mar 2015 15:43	1
<b>Batch ID</b> R250765	<b>Test Name :</b> REACTIVE SULFIDE		<b>Matrix:</b> Liquid			
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			09 Mar 2015 12:00	1
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			09 Mar 2015 12:00	1
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			09 Mar 2015 12:00	1
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			09 Mar 2015 12:00	1

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID R250765 Test Name : REACTIVE SULFIDE Matrix: Solid</b>						
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			09 Mar 2015 12:00	1
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			09 Mar 2015 12:00	1
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			08 Mar 2015 16:00	1
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16			08 Mar 2015 16:00	1
<b>Batch ID R250765 Test Name : REACTIVE CYANIDE Matrix: Sludge</b>						
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			09 Mar 2015 12:00	1
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			09 Mar 2015 12:00	1
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			09 Mar 2015 12:00	1
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			09 Mar 2015 12:00	1
<b>Batch ID R250803 Test Name : LOW LEVEL VOLATILES BY SW8260C Matrix: Liquid</b>						
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			09 Mar 2015 18:49	1
<b>Batch ID R250809 Test Name : TCLP VOLATILES Matrix: Solid</b>						
HS15030132-02	USOR-EQ-11-Large Blue Hopper	03 Mar 2015 16:16	05 Mar 2015 15:30	05 Mar 2015 15:30	09 Mar 2015 22:09	20
<b>Batch ID R250865 Test Name : IGNITABILITY Matrix: Liquid</b>						
HS15030132-03	Equipment Blank # 1	03 Mar 2015 16:30			10 Mar 2015 16:00	1
<b>Batch ID R250865 Test Name : IGNITABILITY Matrix: Sludge</b>						
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02			10 Mar 2015 16:00	1
<b>Batch ID R250903 Test Name : TCLP VOLATILES Matrix: Sludge</b>						
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03 Mar 2015 16:02	05 Mar 2015 15:30	05 Mar 2015 15:30	10 Mar 2015 17:58	20

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91106      **Instrument:** ICPMS04      **Method:** SW6020

MBLK		Sample ID: MBLK-91106			Units: mg/L		Analysis Date: 06-Mar-2015 18:07			
Client ID:		Run ID: ICPMS04_250669			SeqNo: 3206871		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.00500								
Barium	U	0.00500								
Cadmium	U	0.00200								
Chromium	U	0.00500								
Lead	U	0.00500								
Selenium	U	0.00500								
Silver	U	0.00500								

LCS		Sample ID: MLCS-91106			Units: mg/L		Analysis Date: 06-Mar-2015 18:12			
Client ID:		Run ID: ICPMS04_250669			SeqNo: 3206872		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04753	0.00500	0.05	0	95.1	80 - 120				
Barium	0.05004	0.00500	0.05	0	100	80 - 120				
Cadmium	0.05039	0.00200	0.05	0	101	80 - 120				
Chromium	0.04775	0.00500	0.05	0	95.5	80 - 120				
Lead	0.04961	0.00500	0.05	0	99.2	80 - 120				
Selenium	0.04827	0.00500	0.05	0	96.5	80 - 120				
Silver	0.04916	0.00500	0.05	0	98.3	80 - 120				

MS		Sample ID: HS15030110-01MS			Units: mg/L		Analysis Date: 06-Mar-2015 18:43			
Client ID:		Run ID: ICPMS04_250669			SeqNo: 3206879		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0485	0.00500	0.05	0.001844	93.3	80 - 120				
Barium	0.1236	0.00500	0.05	0.06925	109	80 - 120				
Cadmium	0.04972	0.00200	0.05	0	99.4	80 - 120				
Chromium	0.04559	0.00500	0.05	0	91.2	80 - 120				
Lead	0.05073	0.00500	0.05	0	101	80 - 120				
Selenium	0.04925	0.00500	0.05	0.000986	96.5	80 - 120				
Silver	0.04707	0.00500	0.05	0	94.1	80 - 120				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91106      **Instrument:** ICPMS04      **Method:** SW6020

<b>MSD</b>		Sample ID: <b>HS15030110-01MSD</b>			Units: <b>mg/L</b>		Analysis Date: <b>06-Mar-2015 18:48</b>			
Client ID:		Run ID: <b>ICPMS04_250669</b>			SeqNo: <b>3206880</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05114	0.00500	0.05	0.001844	98.6	80 - 120	0.0485	5.31	20	
Barium	0.1221	0.00500	0.05	0.06925	106	80 - 120	0.1236	1.25	20	
Cadmium	0.05008	0.00200	0.05	0	100	80 - 120	0.04972	0.725	20	
Chromium	0.04781	0.00500	0.05	0	95.6	80 - 120	0.04559	4.75	20	
Lead	0.05144	0.00500	0.05	0	103	80 - 120	0.05073	1.39	20	
Selenium	0.05184	0.00500	0.05	0.000986	102	80 - 120	0.04925	5.13	20	
Silver	0.04813	0.00500	0.05	0	96.3	80 - 120	0.04707	2.23	20	

<b>DUP</b>		Sample ID: <b>HS15030110-01DUP</b>			Units: <b>mg/L</b>		Analysis Date: <b>06-Mar-2015 18:34</b>			
Client ID:		Run ID: <b>ICPMS04_250669</b>			SeqNo: <b>3206877</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.001927	0.00500					0.001844	0	20	J
Barium	0.07103	0.00500					0.06925	2.54	20	
Cadmium	U	0.00200					0.000015	0	20	
Chromium	U	0.00500					0.000799	0	20	
Lead	U	0.00500					0.00037	0	20	
Selenium	0.001053	0.00500					0.000986	0	20	J
Silver	U	0.00500					-0.000001	0	20	

<b>PDS</b>		Sample ID: <b>HS15030110-01BS</b>			Units: <b>mg/L</b>		Analysis Date: <b>06-Mar-2015 19:00</b>			
Client ID:		Run ID: <b>ICPMS04_250669</b>			SeqNo: <b>3206883</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.09674	0.00500	0.1	0.001844	94.9	75 - 125				
Barium	0.1632	0.00500	0.1	0.06925	94.0	75 - 125				
Cadmium	0.09575	0.00200	0.1	0	95.8	75 - 125				
Chromium	0.09097	0.00500	0.1	0	91.0	75 - 125				
Lead	0.09599	0.00500	0.1	0	96.0	75 - 125				
Selenium	0.09633	0.00500	0.1	0.000986	95.3	75 - 125				
Silver	0.09142	0.00500	0.1	0	91.4	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91106      **Instrument:** ICPMS04      **Method:** SW6020

SD		Sample ID: HS15030110-01 DIL SX			Units: mg/L		Analysis Date: 06-Mar-2015 18:39			
Client ID:		Run ID: ICPMS04_250669			SeqNo: 3206878		PrepDate: 05-Mar-2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0250					0.001844		0	10
Barium	0.0707	0.0250					0.06925		2.09	10
Cadmium	U	0.0100					0.000015		0	10
Chromium	U	0.0250					0.000799		0	10
Lead	U	0.0250					0.00037		0	10
Selenium	U	0.0250					0.000986		0	10
Silver	U	0.0250					-0.000001		0	10

The following samples were analyzed in this batch: HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91117		Instrument: HG03		Method: SW7470	
<b>MBLK</b>	Sample ID: <b>GBLKW1-030515</b>	Units: <b>mg/L</b>		Analysis Date: <b>05-Mar-2015 12:52</b>	
Client ID:	Run ID: <b>HG03_250620</b>	SeqNo: <b>3204922</b>	PrepDate: <b>05-Mar-2015</b>	DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC Control Limit RPD Ref Value %RPD Limit Qual
Mercury	U	0.000200			
<b>LCS</b>	Sample ID: <b>GLCSW1-030515</b>	Units: <b>mg/L</b>		Analysis Date: <b>05-Mar-2015 12:53</b>	
Client ID:	Run ID: <b>HG03_250620</b>	SeqNo: <b>3204923</b>	PrepDate: <b>05-Mar-2015</b>	DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC Control Limit RPD Ref Value %RPD Limit Qual
Mercury	0.00497	0.000200	0.005	0	99.4 80 - 124
<b>MS</b>	Sample ID: <b>HS15030110-01MS</b>	Units: <b>mg/L</b>		Analysis Date: <b>05-Mar-2015 13:00</b>	
Client ID:	Run ID: <b>HG03_250620</b>	SeqNo: <b>3204926</b>	PrepDate: <b>05-Mar-2015</b>	DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC Control Limit RPD Ref Value %RPD Limit Qual
Mercury	0.00491	0.000200	0.005	-0.00002	98.6 80 - 124
<b>MSD</b>	Sample ID: <b>HS15030110-01MSD</b>	Units: <b>mg/L</b>		Analysis Date: <b>05-Mar-2015 13:02</b>	
Client ID:	Run ID: <b>HG03_250620</b>	SeqNo: <b>3204927</b>	PrepDate: <b>05-Mar-2015</b>	DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC Control Limit RPD Ref Value %RPD Limit Qual
Mercury	0.00506	0.000200	0.005	-0.00002	102 80 - 124 0.00491 3.01 20
<b>DUP</b>	Sample ID: <b>HS15030110-01DUP</b>	Units: <b>mg/L</b>		Analysis Date: <b>05-Mar-2015 12:58</b>	
Client ID:	Run ID: <b>HG03_250620</b>	SeqNo: <b>3204925</b>	PrepDate: <b>05-Mar-2015</b>	DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC Control Limit RPD Ref Value %RPD Limit Qual
Mercury	U	0.000200			-0.00002 0 20

The following samples were analyzed in this batch: HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

<b>Batch ID:</b> 91155	<b>Instrument:</b> ICPMS04	<b>Method:</b> SW1311/6020								
<b>MBLK</b>	Sample ID: <b>MBLKT1-91155</b>	Units: <b>mg/L</b>	Analysis Date: <b>09-Mar-2015 15:53</b>							
Client ID:	Run ID: <b>ICPMS04_250755</b>	SeqNo: <b>3208567</b>	PrepDate: <b>06-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.0500								
Barium	0.02855	0.200								J
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

<b>MBLK</b>	Sample ID: <b>MBLK-91155</b>	Units: <b>mg/L</b>	Analysis Date: <b>09-Mar-2015 15:57</b>							
Client ID:	Run ID: <b>ICPMS04_250755</b>	SeqNo: <b>3208568</b>	PrepDate: <b>06-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.00500								
Barium	U	0.0200								
Cadmium	U	0.00500								
Chromium	U	0.00500								
Lead	U	0.00500								
Selenium	U	0.00500								
Silver	U	0.00500								

<b>LCS</b>	Sample ID: <b>MLCS-91155</b>	Units: <b>mg/L</b>	Analysis Date: <b>09-Mar-2015 16:01</b>							
Client ID:	Run ID: <b>ICPMS04_250755</b>	SeqNo: <b>3208569</b>	PrepDate: <b>06-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	0.04927	0.00500	0.05	0	98.5	80 - 120				
Barium	0.04996	0.0200	0.05	0	99.9	80 - 120				
Cadmium	0.05064	0.00500	0.05	0	101	80 - 120				
Chromium	0.04777	0.00500	0.05	0	95.5	80 - 120				
Lead	0.04843	0.00500	0.05	0	96.9	80 - 120				
Selenium	0.04949	0.00500	0.05	0	99.0	80 - 120				
Silver	0.04912	0.00500	0.05	0	98.2	80 - 120				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91155      **Instrument:** ICPMS04      **Method:** SW1311/6020

MS		Sample ID: HS15030125-01MS			Units: mg/L		Analysis Date: 09-Mar-2015 16:19			
Client ID:		Run ID: ICPMS04_250755			SeqNo: 3208573		PrepDate: 06-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4925	0.0500	0.5	0.00696	97.1	80 - 120				
Barium	0.5575	0.200	0.5	0.07033	97.4	80 - 120				
Cadmium	0.4913	0.0500	0.5	0.0005	98.2	80 - 120				
Chromium	0.4693	0.0500	0.5	0.00645	92.6	80 - 120				
Lead	0.4768	0.0500	0.5	0.00004	95.3	80 - 120				
Selenium	0.4915	0.0500	0.5	0.00608	97.1	80 - 120				
Silver	0.4663	0.0500	0.5	0.00014	93.2	80 - 120				

MSD		Sample ID: HS15030125-01MSD			Units: mg/L		Analysis Date: 09-Mar-2015 16:23			
Client ID:		Run ID: ICPMS04_250755			SeqNo: 3208574		PrepDate: 06-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5094	0.0500	0.5	0.00696	100	80 - 120	0.4925	3.38	20	
Barium	0.5965	0.200	0.5	0.07033	105	80 - 120	0.5575	6.75	20	
Cadmium	0.5263	0.0500	0.5	0.0005	105	80 - 120	0.4913	6.88	20	
Chromium	0.488	0.0500	0.5	0.00645	96.3	80 - 120	0.4693	3.89	20	
Lead	0.5069	0.0500	0.5	0.00004	101	80 - 120	0.4768	6.12	20	
Selenium	0.5083	0.0500	0.5	0.00608	100	80 - 120	0.4915	3.37	20	
Silver	0.4891	0.0500	0.5	0.00014	97.8	80 - 120	0.4663	4.79	20	

DUP		Sample ID: HS15030125-01DUP			Units: mg/L		Analysis Date: 09-Mar-2015 16:10			
Client ID:		Run ID: ICPMS04_250755			SeqNo: 3208571		PrepDate: 06-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0500					0.00696		0	25
Barium	0.06688	0.200					0.07033		0	25 J
Cadmium	U	0.0500					0.0005		0	25
Chromium	U	0.0500					0.00645		0	25
Lead	U	0.0500					0.00004		0	25
Selenium	U	0.0500					0.00608		0	25
Silver	U	0.0500					0.00014		0	25

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91155      **Instrument:** ICPMS04      **Method:** SW1311/6020

PDS		Sample ID: HS15030125-01BS			Units: mg/L		Analysis Date: 09-Mar-2015 16:27			
Client ID:		Run ID: ICPMS04_250755			SeqNo: 3208575		PrepDate: 06-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.9167	0.0500	1	0.00696	91.0	75 - 125				
Barium	1.102	0.200	1	0.07033	103	75 - 125				
Cadmium	1.015	0.0500	1	0.0005	101	75 - 125				
Chromium	0.8726	0.0500	1	0.00645	86.6	75 - 125				
Lead	0.9748	0.0500	1	0.00004	97.5	75 - 125				
Selenium	0.901	0.0500	1	0.00608	89.5	75 - 125				
Silver	0.9454	0.0500	1	0.00014	94.5	75 - 125				

SD		Sample ID: HS15030125-01 DIL SX			Units: mg/L		Analysis Date: 09-Mar-2015 16:14			
Client ID:		Run ID: ICPMS04_250755			SeqNo: 3208572		PrepDate: 06-Mar-2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.00696		0	10
Barium	0.06194	1.00					0.07033		0	10 J
Cadmium	U	0.250					0.0005		0	10
Chromium	U	0.250					0.00645		0	10
Lead	U	0.250					0.00004		0	10
Selenium	U	0.250					0.00608		0	10
Silver	U	0.250					0.00014		0	10

The following samples were analyzed in this batch: HS15030132-01      HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91298		Instrument: HG03			Method: SW7470					
<b>MBLK</b>	Sample ID: <b>GBLKW1-031115</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:19</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210687</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								
<b>MBLK</b>	Sample ID: <b>GBLKT1-031015</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:33</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210695</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								
<b>LCS</b>	Sample ID: <b>GLCSW1-031115</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:21</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210688</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00517	0.000200	0.005	0	103	80 - 120				
<b>MS</b>	Sample ID: <b>HS15030213-01MS</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:26</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210691</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00504	0.000200	0.005	0.000013	101	75 - 125				
<b>MSD</b>	Sample ID: <b>HS15030213-01MSD</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:28</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210692</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00532	0.000200	0.005	0.000013	106	75 - 125	0.00504	5.41	20	
<b>DUP</b>	Sample ID: <b>HS15030213-01DUP</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:24</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210690</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					0.000013	0	20	

The following samples were analyzed in this batch: HS15030132-01 HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91136      **Instrument:** SV-6      **Method:** SW8270

MBLK		Sample ID: MBLK-91136		Units: ug/L		Analysis Date: 05-Mar-2015 14:54				
Client ID:		Run ID: SV-6_250768		SeqNo: 3207772		PrepDate: 05-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	0.20								
2,4,6-Trichlorophenol	U	0.20								
2,4-Dinitrotoluene	U	0.20								
2-Methylphenol	U	0.20								
3&4-Methylphenol	U	0.20								
Hexachlorobenzene	U	0.20								
Hexachlorobutadiene	U	0.20								
Hexachloroethane	U	0.20								
Nitrobenzene	U	0.20								
Pentachlorophenol	U	0.20								
Pyridine	U	1.0								
<i>Surr: 2,4,6-Tribromophenol</i>	2.761	0.20	5	0	55.2	34 - 129				
<i>Surr: 2-Fluorobiphenyl</i>	3.448	0.20	5	0	69.0	40 - 125				
<i>Surr: 2-Fluorophenol</i>	3.733	0.20	5	0	74.7	20 - 120				
<i>Surr: 4-Terphenyl-d14</i>	4.218	0.20	5	0	84.4	40 - 135				
<i>Surr: Nitrobenzene-d5</i>	3.922	0.20	5	0	78.4	41 - 120				
<i>Surr: Phenol-d6</i>	3.753	0.20	5	0	75.1	20 - 120				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
<b>LCS</b>	Sample ID: <b>LCS-91136</b>	Units: <b>ug/L</b>			Analysis Date: <b>05-Mar-2015 15:13</b>					
Client ID:	Run ID: <b>SV-6_250768</b>	SeqNo: <b>3207773</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	3.743	0.20	5	0	74.9	46 - 120				
2,4,6-Trichlorophenol	3.722	0.20	5	0	74.4	42 - 120				
2,4-Dinitrotoluene	4.127	0.20	5	0	82.5	50 - 122				
2-Methylphenol	3.789	0.20	5	0	75.8	45 - 120				
3&4-Methylphenol	3.774	0.20	5	0	75.5	35 - 120				
Hexachlorobenzene	3.158	0.20	5	0	63.2	48 - 120				
Hexachlorobutadiene	3.271	0.20	5	0	65.4	40 - 120				
Hexachloroethane	3.882	0.20	5	0	77.6	40 - 120				
Nitrobenzene	4.156	0.20	5	0	83.1	44 - 120				
Pentachlorophenol	3.493	0.20	5	0	69.9	19 - 121				
Pyridine	3.731	1.0	5	0	74.6	15 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>3.415</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>68.3</i>	<i>34 - 129</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.844</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>76.9</i>	<i>40 - 125</i>				
<i>Surr: 2-Fluorophenol</i>	<i>4.249</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.0</i>	<i>20 - 120</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>4.66</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>93.2</i>	<i>40 - 135</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>4.335</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>86.7</i>	<i>41 - 120</i>				
<i>Surr: Phenol-d6</i>	<i>4.267</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.3</i>	<i>20 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
<b>LCSD</b>	Sample ID: <b>LCSD-91136</b>	Units: <b>ug/L</b>			Analysis Date: <b>05-Mar-2015 15:33</b>					
Client ID:	Run ID: <b>SV-6_250768</b>	SeqNo: <b>3207774</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3.691	0.20	5	0	73.8	46 - 120	3.743	1.41	20	
2,4,6-Trichlorophenol	3.266	0.20	5	0	65.3	42 - 120	3.722	13.1	20	
2,4-Dinitrotoluene	3.642	0.20	5	0	72.8	50 - 122	4.127	12.5	20	
2-Methylphenol	3.588	0.20	5	0	71.8	45 - 120	3.789	5.45	20	
3&4-Methylphenol	3.571	0.20	5	0	71.4	35 - 120	3.774	5.53	20	
Hexachlorobenzene	2.919	0.20	5	0	58.4	48 - 120	3.158	7.87	20	
Hexachlorobutadiene	3.188	0.20	5	0	63.8	40 - 120	3.271	2.59	20	
Hexachloroethane	3.76	0.20	5	0	75.2	40 - 120	3.882	3.2	20	
Nitrobenzene	4.082	0.20	5	0	81.6	44 - 120	4.156	1.8	20	
Pentachlorophenol	3.047	0.20	5	0	60.9	19 - 121	3.493	13.6	20	
Pyridine	3.389	1.0	5	0	67.8	15 - 120	3.731	9.6	20	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>2.919</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>58.4</i>	<i>34 - 129</i>	<i>3.415</i>	<i>15.7</i>		
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.531</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>70.6</i>	<i>40 - 125</i>	<i>3.844</i>	<i>8.48</i>		
<i>Surr: 2-Fluorophenol</i>	<i>3.939</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>78.8</i>	<i>20 - 120</i>	<i>4.249</i>	<i>7.57</i>		
<i>Surr: 4-Terphenyl-d14</i>	<i>4.289</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.8</i>	<i>40 - 135</i>	<i>4.66</i>	<i>8.28</i>		
<i>Surr: Nitrobenzene-d5</i>	<i>4.102</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>82.0</i>	<i>41 - 120</i>	<i>4.335</i>	<i>5.53</i>		
<i>Surr: Phenol-d6</i>	<i>3.992</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>79.8</i>	<i>20 - 120</i>	<i>4.267</i>	<i>6.65</i>		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
<b>MS</b>	Sample ID: <b>HS15030113-05MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>05-Mar-2015 16:12</b>					
Client ID:	Run ID: <b>SV-6_250768</b>	SeqNo: <b>3207816</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	3.49	0.20	5	0	69.8	46 - 120				
2,4,6-Trichlorophenol	3.312	0.20	5	0	66.2	42 - 120				
2,4-Dinitrotoluene	3.823	0.20	5	0	76.5	50 - 122				
2-Methylphenol	3.501	0.20	5	0	70.0	45 - 120				
3&4-Methylphenol	3.918	0.20	5	0	78.4	35 - 120				
Hexachlorobenzene	2.921	0.20	5	0	58.4	48 - 120				
Hexachlorobutadiene	2.92	0.20	5	0	58.4	40 - 120				
Hexachloroethane	3.572	0.20	5	0	71.4	40 - 120				
Nitrobenzene	3.881	0.20	5	0	77.6	44 - 120				
Pentachlorophenol	3.364	0.20	5	0	67.3	19 - 121				
Pyridine	3.469	1.0	5	0	69.4	15 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>3.021</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>60.4</i>	<i>34 - 129</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.437</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>68.7</i>	<i>40 - 125</i>				
<i>Surr: 2-Fluorophenol</i>	<i>3.679</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>73.6</i>	<i>20 - 120</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>4.757</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>95.1</i>	<i>40 - 135</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>3.939</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>78.8</i>	<i>41 - 120</i>				
<i>Surr: Phenol-d6</i>	<i>3.802</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>76.0</i>	<i>20 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91136      **Instrument:** SV-6      **Method:** SW8270

MSD		Sample ID: HS15030113-05MSD			Units: ug/L		Analysis Date: 05-Mar-2015 16:31			
Client ID:		Run ID: SV-6_250768			SeqNo: 3207817		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3.8	0.20	5	0	76.0	46 - 120	3.49	8.51	20	
2,4,6-Trichlorophenol	3.442	0.20	5	0	68.8	42 - 120	3.312	3.84	20	
2,4-Dinitrotoluene	4.009	0.20	5	0	80.2	50 - 122	3.823	4.76	20	
2-Methylphenol	3.65	0.20	5	0	73.0	45 - 120	3.501	4.16	20	
3&4-Methylphenol	4.117	0.20	5	0	82.3	35 - 120	3.918	4.96	20	
Hexachlorobenzene	3.021	0.20	5	0	60.4	48 - 120	2.921	3.36	20	
Hexachlorobutadiene	3.04	0.20	5	0	60.8	40 - 120	2.92	4.05	20	
Hexachloroethane	3.688	0.20	5	0	73.8	40 - 120	3.572	3.22	20	
Nitrobenzene	4.018	0.20	5	0	80.4	44 - 120	3.881	3.46	20	
Pentachlorophenol	3.3	0.20	5	0	66.0	19 - 121	3.364	1.93	20	
Pyridine	3.599	1.0	5	0	72.0	15 - 120	3.469	3.68	20	
<i>Surr: 2,4,6-Tribromophenol</i>	3.229	0.20	5	0	64.6	34 - 129	3.021	6.64		
<i>Surr: 2-Fluorobiphenyl</i>	3.504	0.20	5	0	70.1	40 - 125	3.437	1.93		
<i>Surr: 2-Fluorophenol</i>	3.809	0.20	5	0	76.2	20 - 120	3.679	3.47		
<i>Surr: 4-Terphenyl-d14</i>	4.573	0.20	5	0	91.5	40 - 135	4.757	3.95		
<i>Surr: Nitrobenzene-d5</i>	3.994	0.20	5	0	79.9	41 - 120	3.939	1.39		
<i>Surr: Phenol-d6</i>	3.88	0.20	5	0	77.6	20 - 120	3.802	2.03		

The following samples were analyzed in this batch: HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91156      **Instrument:** SV-3      **Method:** SW1311/8270

MBLK	Sample ID: MBLK-91156	Units: ug/L			Analysis Date: 06-Mar-2015 13:19					
Client ID:	Run ID: SV-3_250697	SeqNo: 3206265	PrepDate: 06-Mar-2015	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>76.21</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.2</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>76.87</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.9</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>70.39</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>70.4</i>	<i>21 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>70.02</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>70.0</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>74.49</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>74.5</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>74.32</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>74.3</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91156		Instrument: SV-3		Method: SW1311/8270						
<b>LCS</b>	Sample ID: <b>LCS-91156</b>	Units: <b>ug/L</b>			Analysis Date: <b>06-Mar-2015 13:42</b>					
Client ID:	Run ID: <b>SV-3_250697</b>	SeqNo: <b>3206266</b>	PrepDate: <b>06-Mar-2015</b>	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	75.52	5.0	100	0	75.5	55 - 120				
2,4,6-Trichlorophenol	80.77	5.0	100	0	80.8	55 - 120				
2,4-Dinitrotoluene	40.22	5.0	50	0	80.4	55 - 125				
Cresols, Total	214.6	15	250	0	85.8	40 - 120				
Hexachlorobenzene	44.07	5.0	50	0	88.1	55 - 120				
Hexachlorobutadiene	40.68	5.0	50	0	81.4	55 - 120				
Hexachloroethane	38.85	5.0	50	0	77.7	55 - 120				
Nitrobenzene	41.83	5.0	50	0	83.7	55 - 120				
Pentachlorophenol	71.76	5.0	100	0	71.8	50 - 135				
Pyridine	32.72	5.0	50	0	65.4	30 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>88.31</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.3</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>80.42</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>80.4</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>93.11</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>93.1</i>	<i>20 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>79.22</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>79.2</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>84.02</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>84.0</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>92.06</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>92.1</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: 91156		Instrument: SV-3		Method: SW1311/8270						
LCSD		Sample ID: LCSD-91156		Units: ug/L		Analysis Date: 06-Mar-2015 14:05				
Client ID:		Run ID: SV-3_250697		SeqNo: 3206267		PrepDate: 06-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	79.77	5.0	100	0	79.8	55 - 120	75.52	5.48	25	
2,4,6-Trichlorophenol	82.13	5.0	100	0	82.1	55 - 120	80.77	1.68	25	
2,4-Dinitrotoluene	42.89	5.0	50	0	85.8	55 - 125	40.22	6.42	25	
Cresols, Total	212	15	250	0	84.8	40 - 120	214.6	1.23	25	
Hexachlorobenzene	42.94	5.0	50	0	85.9	55 - 120	44.07	2.6	25	
Hexachlorobutadiene	40.96	5.0	50	0	81.9	55 - 120	40.68	0.682	25	
Hexachloroethane	39.12	5.0	50	0	78.2	55 - 120	38.85	0.68	25	
Nitrobenzene	41.65	5.0	50	0	83.3	55 - 120	41.83	0.424	25	
Pentachlorophenol	79.44	5.0	100	0	79.4	50 - 135	71.76	10.2	25	
Pyridine	35.94	5.0	50	0	71.9	30 - 120	32.72	9.36	25	
Surr: 2,4,6-Tribromophenol	96.07	5.0	100	0	96.1	39 - 153	88.31	8.42	25	
Surr: 2-Fluorobiphenyl	78.79	5.0	100	0	78.8	40 - 147	80.42	2.04	25	
Surr: 2-Fluorophenol	90.41	5.0	100	0	90.4	21 - 110	93.11	2.94	25	
Surr: 4-Terphenyl-d14	78.57	5.0	100	0	78.6	39 - 141	79.22	0.826	25	
Surr: Nitrobenzene-d5	83.78	5.0	100	0	83.8	37 - 140	84.02	0.281	25	
Surr: Phenol-d6	89.04	5.0	100	0	89.0	11 - 110	92.06	3.34	25	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** 91156      **Instrument:** SV-3      **Method:** SW1311/8270

MS		Sample ID: HS15030132-02MS		Units: ug/L		Analysis Date: 09-Mar-2015 15:08			
Client ID: USOR-EQ-11-Large Blue Hopper		Run ID: SV-3_250697		SeqNo: 3208129		PrepDate: 06-Mar-2015		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
2,4,5-Trichlorophenol	87.81	75	100	0	87.8	55 - 120			
2,4,6-Trichlorophenol	67.53	75	100	0	67.5	55 - 120			J
2,4-Dinitrotoluene	42.54	75	50	0	85.1	55 - 125			J
Cresols, Total	355.2	220	250	161.3	77.6	40 - 120			
Hexachlorobenzene	37.43	75	50	0	74.9	55 - 120			J
Hexachlorobutadiene	36.34	75	50	0	72.7	55 - 120			J
Hexachloroethane	32.93	75	50	0	65.9	55 - 120			J
Nitrobenzene	38.49	75	50	0	77.0	55 - 120			J
Pentachlorophenol	106.6	75	100	0	107	50 - 135			
Pyridine	32.53	75	50	0	65.1	30 - 120			J
Surr: 2,4,6-Tribromophenol	71.51	75	100	0	71.5	39 - 153			J
Surr: 2-Fluorobiphenyl	71.56	75	100	0	71.6	40 - 147			J
Surr: 2-Fluorophenol	67.34	75	100	0	67.3	21 - 110			J
Surr: 4-Terphenyl-d14	73.15	75	100	0	73.1	39 - 141			J
Surr: Nitrobenzene-d5	75.13	75	100	0	75.1	37 - 140			
Surr: Phenol-d6	79.76	75	100	0	79.8	11 - 110			

The following samples were analyzed in this batch: HS15030132-01      HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250657      **Instrument:** VOA4      **Method:** SW8260

MBLK	Sample ID: VBLKW-150305	Units: ug/L			Analysis Date: 06-Mar-2015 00:43					
Client ID:	Run ID: VOA4_250657	SeqNo: 3205447	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	52.33	1.0	50	0	105	71 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	50.71	1.0	50	0	101	70 - 125				
<i>Surr: Dibromofluoromethane</i>	51.1	1.0	50	0	102	74 - 125				
<i>Surr: Toluene-d8</i>	55.83	1.0	50	0	112	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250657		Instrument: VOA4		Method: SW8260						
<b>LCS</b>	Sample ID: <b>VLCSW-150305</b>	Units: <b>ug/L</b>			Analysis Date: <b>05-Mar-2015 23:53</b>					
Client ID:	Run ID: <b>VOA4_250657</b>	SeqNo: <b>3205446</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	53.33	1.0	50	0	107	75 - 130				
1,2-Dichloroethane	54.28	1.0	50	0	109	76 - 120				
1,4-Dichlorobenzene	52.2	1.0	50	0	104	80 - 120				
2-Butanone	107.9	2.0	100	0	108	60 - 140				
Benzene	53.89	1.0	50	0	108	80 - 120				
Carbon tetrachloride	48.58	1.0	50	0	97.2	75 - 125				
Chlorobenzene	52.55	1.0	50	0	105	80 - 120				
Chloroform	53.53	1.0	50	0	107	70 - 130				
Tetrachloroethene	51.63	1.0	50	0	103	75 - 130				
Trichloroethene	54.65	1.0	50	0	109	71 - 125				
Vinyl chloride	56.93	1.0	50	0	114	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.29</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.29</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.36</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>53.21</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250657		Instrument: VOA4		Method: SW8260						
<b>MS</b>	Sample ID: <b>HS15030110-01MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>06-Mar-2015 02:48</b>					
Client ID:	Run ID: <b>VOA4_250657</b>	SeqNo: <b>3205452</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	55.12	1.0	50	0	110	75 - 130				
1,2-Dichloroethane	52.27	1.0	50	0	105	76 - 120				
1,4-Dichlorobenzene	49.45	1.0	50	0	98.9	80 - 120				
2-Butanone	100.8	2.0	100	0	101	60 - 140				
Benzene	54.26	1.0	50	0	109	80 - 120				
Carbon tetrachloride	50.7	1.0	50	0	101	79 - 120				
Chlorobenzene	50.18	1.0	50	0	100	80 - 120				
Chloroform	52.45	1.0	50	0	105	70 - 130				
Tetrachloroethene	52.95	1.0	50	0	106	75 - 130				
Trichloroethene	54.78	1.0	50	0	110	71 - 125				
Vinyl chloride	56.58	1.0	50	0	113	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.61</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>99.2</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.55</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>51.72</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>53.09</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250657      **Instrument:** VOA4      **Method:** SW8260

MSD		Sample ID: HS15030110-01MSD			Units: ug/L		Analysis Date: 06-Mar-2015 03:13			
Client ID:		Run ID: VOA4_250657			SeqNo: 3205453		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	53.43	1.0	50	0	107	75 - 130	55.12	3.13	20	
1,2-Dichloroethane	51.16	1.0	50	0	102	76 - 120	52.27	2.15	20	
1,4-Dichlorobenzene	48.79	1.0	50	0	97.6	80 - 120	49.45	1.34	20	
2-Butanone	113.7	2.0	100	0	114	60 - 140	100.8	12	20	
Benzene	52.79	1.0	50	0	106	80 - 120	54.26	2.76	20	
Carbon tetrachloride	48.24	1.0	50	0	96.5	75 - 125	50.7	4.98	20	
Chlorobenzene	48.72	1.0	50	0	97.4	80 - 120	50.18	2.96	20	
Chloroform	50.07	1.0	50	0	100	70 - 130	52.45	4.64	20	
Tetrachloroethene	50.94	1.0	50	0	102	75 - 130	52.95	3.87	20	
Trichloroethene	51.32	1.0	50	0	103	71 - 125	54.78	6.51	20	
Vinyl chloride	54.13	1.0	50	0	108	70 - 135	56.58	4.41	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.42</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.8</i>	<i>71 - 125</i>	<i>49.61</i>	<i>0.368</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.78</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>70 - 125</i>	<i>51.55</i>	<i>1.51</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>50.26</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>74 - 125</i>	<i>51.72</i>	<i>2.86</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>51.38</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>	<i>53.09</i>	<i>3.29</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030132-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250803		Instrument: VOA4		Method: SW8260						
MBLK	Sample ID: VBLKW-150309	Units: ug/L			Analysis Date: 09-Mar-2015 09:39					
Client ID:	Run ID: VOA4_250803	SeqNo: 3208711		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.14</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>48.15</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>96.3</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.27</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>53.16</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250803		Instrument: VOA4		Method: SW8260						
<b>LCS</b>	Sample ID: <b>VLCSW-150309</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 08:49</b>					
Client ID:	Run ID: <b>VOA4_250803</b>	SeqNo: <b>3208710</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	53.45	1.0	50	0	107	75 - 130				
1,2-Dichloroethane	55.78	1.0	50	0	112	76 - 120				
1,4-Dichlorobenzene	50.77	1.0	50	0	102	80 - 120				
2-Butanone	119.6	2.0	100	0	120	60 - 140				
Benzene	54.11	1.0	50	0	108	80 - 120				
Carbon tetrachloride	46.67	1.0	50	0	93.3	75 - 125				
Chlorobenzene	51.76	1.0	50	0	104	80 - 120				
Chloroform	55.11	1.0	50	0	110	70 - 130				
Tetrachloroethene	49.81	1.0	50	0	99.6	75 - 130				
Trichloroethene	53.13	1.0	50	0	106	71 - 125				
Vinyl chloride	55.99	1.0	50	0	112	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>51.82</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.66</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.69</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>52.04</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250803		Instrument: VOA4		Method: SW8260						
<b>MS</b>	Sample ID: <b>HS15030221-01MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 12:10</b>					
Client ID:	Run ID: <b>VOA4_250803</b>	SeqNo: <b>3208717</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	52.27	1.0	50	0	105	75 - 130				
1,2-Dichloroethane	51.69	1.0	50	0	103	76 - 120				
1,4-Dichlorobenzene	46.57	1.0	50	0	93.1	80 - 120				
2-Butanone	106.6	2.0	100	0	107	60 - 140				
Benzene	50.53	1.0	50	0	101	80 - 120				
Carbon tetrachloride	48.81	1.0	50	0	97.6	79 - 120				
Chlorobenzene	48.37	1.0	50	0	96.7	80 - 120				
Chloroform	50.19	1.0	50	0	100	70 - 130				
Tetrachloroethene	50.04	1.0	50	0	100	75 - 130				
Trichloroethene	51.52	1.0	50	0	103	71 - 125				
Vinyl chloride	52.48	1.0	50	0	105	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>51.81</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.57</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>52.92</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>52.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250803      **Instrument:** VOA4      **Method:** SW8260

MSD		Sample ID: HS15030221-01MSD			Units: ug/L		Analysis Date: 09-Mar-2015 12:35			
Client ID:		Run ID: VOA4_250803			SeqNo: 3208718		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	53.81	1.0	50	0	108	75 - 130	52.27	2.9	20	
1,2-Dichloroethane	53.11	1.0	50	0	106	76 - 120	51.69	2.72	20	
1,4-Dichlorobenzene	47.67	1.0	50	0	95.3	80 - 120	46.57	2.32	20	
2-Butanone	107.1	2.0	100	0	107	60 - 140	106.6	0.466	20	
Benzene	52.42	1.0	50	0	105	80 - 120	50.53	3.67	20	
Carbon tetrachloride	49.13	1.0	50	0	98.3	75 - 125	48.81	0.647	20	
Chlorobenzene	50.41	1.0	50	0	101	80 - 120	48.37	4.13	20	
Chloroform	51.47	1.0	50	0	103	70 - 130	50.19	2.53	20	
Tetrachloroethene	50.55	1.0	50	0	101	75 - 130	50.04	1.02	20	
Trichloroethene	52.33	1.0	50	0	105	71 - 125	51.52	1.56	20	
Vinyl chloride	54.66	1.0	50	0	109	70 - 135	52.48	4.08	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>51.43</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>71 - 125</i>	<i>51.81</i>	<i>0.75</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.51</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>	<i>51.57</i>	<i>2.09</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>51.2</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>74 - 125</i>	<i>52.92</i>	<i>3.3</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>52.74</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>75 - 125</i>	<i>52.58</i>	<i>0.308</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250809      **Instrument:** VOA4      **Method:** SW1311/8260B

MBLK	Sample ID: VBLKW-150309	Units: ug/L		Analysis Date: 09-Mar-2015 20:53						
Client ID:	Run ID: VOA4_250809	SeqNo: 3208804	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	50.65	5.0	50	0	101	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	47.16	5.0	50	0	94.3	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	50.7	5.0	50	0	101	71.2 - 125				
<i>Surr: Toluene-d8</i>	52.38	5.0	50	0	105	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250809      **Instrument:** VOA4      **Method:** SW1311/8260B

MBLK	Sample ID: MBLKV1-150305	Units: ug/L			Analysis Date: 09-Mar-2015 21:45					
Client ID:	Run ID: VOA4_250809	SeqNo: 3208805	PrepDate:	DF: 20						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1005</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>983.2</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>98.3</i>	<i>72.4 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>1008</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>71.2 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>1095</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>109</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250809		Instrument: VOA4		Method: SW1311/8260B						
<b>LCS</b>	Sample ID: <b>VLCSW-150309</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 20:03</b>					
Client ID:	Run ID: <b>VOA4_250809</b>	SeqNo: <b>3208803</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	51.51	5.0	50	0	103	73 - 124				
1,2-Dichloroethane	55.12	5.0	50	0	110	76 - 120				
1,4-Dichlorobenzene	50.44	5.0	50	0	101	70 - 130				
2-Butanone	112.2	10	100	0	112	70 - 130				
Benzene	53.23	5.0	50	0	106	70 - 128				
Carbon tetrachloride	46.23	5.0	50	0	92.5	70 - 130				
Chlorobenzene	52.56	5.0	50	0	105	72 - 127				
Chloroform	53.76	5.0	50	0	108	70 - 130				
Tetrachloroethene	49.93	5.0	50	0	99.9	70 - 130				
Trichloroethene	51.83	5.0	50	0	104	72 - 129				
Vinyl chloride	55.63	2.0	50	0	111	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.68</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.5</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>51.85</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>51.58</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250809		Instrument: VOA4		Method: SW1311/8260B						
MS	Sample ID: HS15030194-13MS	Units: ug/L			Analysis Date: 09-Mar-2015 23:24					
Client ID:	Run ID: VOA4_250809	SeqNo: 3208809		PrepDate:		DF: 5				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	249.3	25	250	0	99.7	73 - 124				
1,2-Dichloroethane	256.5	25	250	0	103	76 - 120				
1,4-Dichlorobenzene	222.2	25	250	0	88.9	70 - 130				
2-Butanone	557.6	50	500	0	112	70 - 130				
Benzene	255.3	25	250	0	102	70 - 128				
Carbon tetrachloride	226.2	25	250	0	90.5	70 - 130				
Chlorobenzene	234	25	250	0	93.6	72 - 127				
Chloroform	248.6	25	250	0	99.4	70 - 130				
Tetrachloroethene	231.3	25	250	0	92.5	70 - 130				
Trichloroethene	242.5	25	250	0	97.0	72 - 129				
Vinyl chloride	245.8	10	250	0	98.3	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>258.6</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>103</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>253.7</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>261.4</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>105</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>267.8</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>107</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250809		Instrument: VOA4		Method: SW1311/8260B						
MSD	Sample ID: HS15030194-13MSD	Units: ug/L			Analysis Date: 09-Mar-2015 23:49					
Client ID:	Run ID: VOA4_250809	SeqNo: 3208810	PrepDate:	DF: 5						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	279.3	25	250	0	112	73 - 124	249.3	11.3	20	
1,2-Dichloroethane	293.7	25	250	0	117	76 - 120	256.5	13.5	20	
1,4-Dichlorobenzene	256.7	25	250	0	103	70 - 130	222.2	14.4	20	
2-Butanone	665.8	50	500	0	133	70 - 130	557.6	17.7	20	S
Benzene	286.7	25	250	0	115	70 - 128	255.3	11.6	20	
Carbon tetrachloride	253.7	25	250	0	101	70 - 130	226.2	11.5	20	
Chlorobenzene	271.4	25	250	0	109	72 - 127	234	14.8	20	
Chloroform	284.8	25	250	0	114	70 - 130	248.6	13.6	20	
Tetrachloroethene	268	25	250	0	107	70 - 130	231.3	14.7	20	
Trichloroethene	274.1	25	250	0	110	72 - 129	242.5	12.2	20	
Vinyl chloride	282.4	10	250	0	113	70 - 130	245.8	13.9	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>287.1</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>115</i>	<i>70 - 125</i>	<i>258.6</i>	<i>10.5</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>293.6</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>117</i>	<i>72 - 125</i>	<i>253.7</i>	<i>14.6</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>286</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>114</i>	<i>71 - 125</i>	<i>261.4</i>	<i>8.97</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>295.8</i>	<i>25</i>	<i>250</i>	<i>0</i>	<i>118</i>	<i>75 - 125</i>	<i>267.8</i>	<i>9.94</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250903      **Instrument:** VOA6      **Method:** SW1311/8260B

MBLK	Sample ID: VBLKW-150310	Units: ug/L			Analysis Date: 10-Mar-2015 13:57					
Client ID:	Run ID: VOA6_250903	SeqNo: 3210236	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.78</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.6</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>46.59</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.2</i>	<i>72.4 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.8</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.6</i>	<i>71.2 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>48.84</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.7</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250903      **Instrument:** VOA6      **Method:** SW1311/8260B

MBLK		Sample ID: MBLKV1-150309		Units: ug/L		Analysis Date: 10-Mar-2015 18:46			
Client ID:		Run ID: VOA6_250903		SeqNo: 3210242		PrepDate:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
1,1-Dichloroethene	U	100							
1,2-Dichloroethane	U	100							
1,4-Dichlorobenzene	U	100							
2-Butanone	U	200							
Benzene	U	100							
Carbon tetrachloride	U	100							
Chlorobenzene	U	100							
Chloroform	U	100							
Tetrachloroethene	U	100							
Trichloroethene	U	100							
Vinyl chloride	U	40							
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>937.1</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>93.7</i>	<i>70 - 125</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>980</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>98.0</i>	<i>72.4 - 125</i>			
<i>Surr: Dibromofluoromethane</i>	<i>1001</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>71.2 - 125</i>			
<i>Surr: Toluene-d8</i>	<i>950.1</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>95.0</i>	<i>75 - 125</i>			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250903		Instrument: VOA6		Method: SW1311/8260B						
<b>LCS</b>	Sample ID: <b>VLCSW-150310</b>	Units: <b>ug/L</b>			Analysis Date: <b>10-Mar-2015 12:45</b>					
Client ID:	Run ID: <b>VOA6_250903</b>	SeqNo: <b>3210235</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	48.5	5.0	50	0	97.0	73 - 124				
1,2-Dichloroethane	44.13	5.0	50	0	88.3	76 - 120				
1,4-Dichlorobenzene	48.43	5.0	50	0	96.9	70 - 130				
2-Butanone	80.98	10	100	0	81.0	70 - 130				
Benzene	46.92	5.0	50	0	93.8	70 - 128				
Carbon tetrachloride	47.9	5.0	50	0	95.8	70 - 130				
Chlorobenzene	47.45	5.0	50	0	94.9	72 - 127				
Chloroform	46.29	5.0	50	0	92.6	70 - 130				
Tetrachloroethene	47.46	5.0	50	0	94.9	70 - 130				
Trichloroethene	49.13	5.0	50	0	98.3	72 - 129				
Vinyl chloride	44.35	2.0	50	0	88.7	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.63</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.3</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.79</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.46</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>96.9</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49.57</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>99.1</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

Batch ID: R250903		Instrument: VOA6		Method: SW1311/8260B						
<b>MS</b>	Sample ID: <b>HS15030295-01MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>10-Mar-2015 15:09</b>					
Client ID:	Run ID: <b>VOA6_250903</b>	SeqNo: <b>3210238</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	47.12	5.0	50	0	94.2	73 - 124				
1,2-Dichloroethane	43.22	5.0	50	0	86.4	76 - 120				
1,4-Dichlorobenzene	45.09	5.0	50	0	90.2	70 - 130				
2-Butanone	75.39	10	100	0	75.4	70 - 130				
Benzene	46.43	5.0	50	0	92.9	70 - 128				
Carbon tetrachloride	47.71	5.0	50	0	95.4	70 - 130				
Chlorobenzene	47.3	5.0	50	0	94.6	72 - 127				
Chloroform	45.56	5.0	50	0	91.1	70 - 130				
Tetrachloroethene	48.42	5.0	50	0	96.8	70 - 130				
Trichloroethene	48.86	5.0	50	0	97.7	72 - 129				
Vinyl chloride	46.84	2.0	50	0	93.7	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.54</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.1</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.58</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.63</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.3</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49.89</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>99.8</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250903      **Instrument:** VOA6      **Method:** SW1311/8260B

MSD		Sample ID: HS15030295-01MSD			Units: ug/L		Analysis Date: 10-Mar-2015 15:33			
Client ID:		Run ID: VOA6_250903			SeqNo: 3210239		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.61	5.0	50	0	87.2	73 - 124	47.12	7.74	20	
1,2-Dichloroethane	42.81	5.0	50	0	85.6	76 - 120	43.22	0.952	20	
1,4-Dichlorobenzene	45.85	5.0	50	0	91.7	70 - 130	45.09	1.68	20	
2-Butanone	79.84	10	100	0	79.8	70 - 130	75.39	5.74	20	
Benzene	45.05	5.0	50	0	90.1	70 - 128	46.43	3.02	20	
Carbon tetrachloride	44.49	5.0	50	0	89.0	70 - 130	47.71	6.99	20	
Chlorobenzene	47.35	5.0	50	0	94.7	72 - 127	47.3	0.0984	20	
Chloroform	45.26	5.0	50	0	90.5	70 - 130	45.56	0.651	20	
Tetrachloroethene	46.77	5.0	50	0	93.5	70 - 130	48.42	3.46	20	
Trichloroethene	47.63	5.0	50	0	95.3	72 - 129	48.86	2.55	20	
Vinyl chloride	42.32	2.0	50	0	84.6	70 - 130	46.84	10.1	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.3</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>92.6</i>	<i>70 - 125</i>	<i>46.54</i>	<i>0.526</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.32</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>72 - 125</i>	<i>50.58</i>	<i>1.44</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>48.91</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.8</i>	<i>71 - 125</i>	<i>48.63</i>	<i>0.575</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>50.12</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>75 - 125</i>	<i>49.89</i>	<i>0.448</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030132-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250633      **Instrument:** WetChem\_HS      **Method:** SW1030

<b>DUP</b>	Sample ID: <b>HS15030132-02DUP</b>	Units: <b>Burn Rate, mm/sec</b>	Analysis Date: <b>05-Mar-2015 15:00</b>							
Client ID: <b>USOR-EQ-11-Large Blue Hopper</b>	Run ID: <b>WetChem_HS_250633</b>	SeqNo: <b>3205136</b>	PrepDate:      DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability, Solid	Negative	0					0	0	25	

The following samples were analyzed in this batch: HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250666      **Instrument:** WetChem\_HS      **Method:** SM4500H+ B

<b>LCS</b>	Sample ID: <b>LCS-250666</b>	Units: <b>pH Units</b>		Analysis Date: <b>05-Mar-2015 16:15</b>						
Client ID:	Run ID: <b>WetChem_HS_250666</b>	SeqNo: <b>3205581</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.97	0.100	6	0	99.5	97 - 103				

<b>DUP</b>	Sample ID: <b>HS15030152-01DUP</b>	Units: <b>pH Units</b>		Analysis Date: <b>05-Mar-2015 16:15</b>						
Client ID:	Run ID: <b>WetChem_HS_250666</b>	SeqNo: <b>3205582</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.3	0.100					7.25	0.687	10	
Temp Deg C @pH	23.3	0					23.3	0	10	

The following samples were analyzed in this batch: HS15030132-01      HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250705      **Instrument:** WetChem\_HS      **Method:** SW9045B

<b>LCS</b>	Sample ID: <b>LCS-250705</b>	Units: <b>pH Units</b>			Analysis Date: <b>06-Mar-2015 15:43</b>				
Client ID:	Run ID: <b>WetChem_HS_250705</b>	SeqNo: <b>3206325</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	5.97	0.100	6	0	99.5	97 - 103			

<b>DUP</b>	Sample ID: <b>HS15030179-06DUP</b>	Units: <b>pH Units</b>			Analysis Date: <b>06-Mar-2015 15:43</b>				
Client ID:	Run ID: <b>WetChem_HS_250705</b>	SeqNo: <b>3206326</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	7.77	0.100					7.76	0.129	10

The following samples were analyzed in this batch: HS15030132-02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QC BATCH REPORT**

**Batch ID:** R250865      **Instrument:** WetChem\_HS      **Method:** SW1010

<b>LCS</b>	Sample ID: <b>LCS-250865</b>	Units: °F		Analysis Date: <b>10-Mar-2015 16:00</b>						
Client ID:	Run ID: <b>WetChem_HS_250865</b>	SeqNo: <b>3209624</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Ignitability	82	50.0	81	0	101	95 - 105				

<b>DUP</b>	Sample ID: <b>HS15030179-01DUP</b>	Units: °F		Analysis Date: <b>10-Mar-2015 16:00</b>						
Client ID:	Run ID: <b>WetChem_HS_250865</b>	SeqNo: <b>3209625</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Ignitability	> 212	50.0					0	0	25	

The following samples were analyzed in this batch: HS15030132-01      HS15030132-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030132

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b>Unit Reported</b>	<b>Description</b>
°F	Fahrenheit degrees
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
no unit	
pH Units	

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2016
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 2014-2015	31-Jul-2015
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2015	31-Dec-2015
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	T104704231-14-14	30-Apr-2015

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030132

**SAMPLE TRACKING**

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Login	3/4/2015 5:08:08 PM	RPG	Sub
HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	Login	3/4/2015 5:08:08 PM	RPG	VW-3
HS15030132-02	USOR-EQ-11-Large Blue Hopper	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-02	USOR-EQ-11-Large Blue Hopper	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-02	USOR-EQ-11-Large Blue Hopper	Login	3/4/2015 5:08:08 PM	RPG	Sub
HS15030132-03	Equipment Blank # 1	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-03	Equipment Blank # 1	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-03	Equipment Blank # 1	Login	3/4/2015 5:08:08 PM	RPG	13D
HS15030132-03	Equipment Blank # 1	Login	3/4/2015 5:08:08 PM	RPG	Sub
HS15030132-03	Equipment Blank # 1	Login	3/4/2015 5:08:08 PM	RPG	VW-3
HS15030132-04	TRIP BLANK	Login	3/4/2015 5:20:36 PM	RPG	VW-3

Sample Receipt Checklist

Client Name: Effective Env-HOU  
 Work Order: HS15030132

Date/Time Received: **04-Mar-2015 13:45**  
 Received by: **PS**

Checklist completed by: Raegen Giga 4-Mar-2015 Reviewed by: Dane J. Wacasey 6-Mar-2015  
 eSignature Date eSignature Date

Matrices: **water/solid** Carrier name: **ALS.HS**

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No

Temperature(s)/Thermometer(s): 0.8c/0.8c c/u IR 3

Cooler(s)/Kit(s): 4041

Date/Time sample(s) sent to storage: 03/04/2015 17:30

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes: EQ Blk selected total not TCLP test codes per DW.Sx 1 TCLP - vials & Metals bottles preserved, no test codes assigned , bulk bottles used for all TCLP.

Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: 0 Regarding: \_\_\_\_\_

Comments:

Corrective Action:



ALS Laboratory Group  
 10450 Stancliff Rd. #210  
 Houston, Texas 77099  
 (Tel) 281.530.5656  
 (Fax) 281.530.5887

# Chain of Custody Form

Page 1 of 1

# HS15030132

Effective Environmental Inc.  
 USOR Equ Assessment and Sampling 8181



Customer Information			Project Information				Parameter/Method Request for Analysis										
Purchase Order	FS-10054		Project Name	USOR-Equ. Assessment & Sampling			A	TCLP - VOCs									
Work Order			Project Number	8181			B	TCLP - SVOCs									
Company Name	Effective Environmental		Bill To Company	Effective Environmental			C	TCLP RCRA 8 Metals									
Send Report To	Hiren Shah		Invoice Attn	Hiren Shah			D	RCI									
Address	9950 Chemical Road		Address	2515 S. Beltline Road			E	VOCs for trip blank									
City/State/Zip	Pasadena, TX 77507		City/State/Zip	Mesquite, TX 75181			F										
Phone	281-842-0804		Phone	972-329-1200			G										
Fax	281-474-2580		Fax	972-329-1206			H										
e-Mail Address	hshah@eff-env.com		e-Mail Address	hshah@eff-env.com			I										
e-Mail Address	hshah@eff-env.com		e-Mail Address	hshah@eff-env.com			J										
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	USOR-EQ-03 Light Blue Horizontal Cylinder	03/03/15	4:02 p.m.	Liquid		8	X	X	X	X							
2	USOR-EQ-11 - Large Blue Hopper	03/03/15	4:16 p.m.	Solids		4	X	X	X	X							
3	Equipment Blank #1	03/03/15	4:30 p.m.	Liquid		8	X	X	X	X							
4	Trip Blank										X						
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Sampler(s): Please Print & Sign Joe Carillo <i>Joe Carillo</i>	Shipment Method:	Required Turnaround Time: <input type="checkbox"/> 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour	Results Due Date:	
Relinquished by: <i>Joe Carillo</i>	Date: 3/3/15	Time: 5:44 p.m.	Received by: Hiren Shah	Notes:
Relinquished by: Hiren Shah	Date: 3/4/15	Time: 11:15 a.m.	Received by (Laboratory): <i>Vetuk-Blome</i>	Cooler Temp.
Relinquished by: <i>Vetuk-Blome</i>	Date: 3/4/15	Time: 1:39 p.m.	Received by: <i>Vetuk-Blome</i>	QC Package: (Check Box Below)
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035				<input type="checkbox"/> Level II: Standard QC    TRRP-Checklist <input type="checkbox"/> Level III: Std QC + Raw Data    TRRP Level IV <input type="checkbox"/> Level IV: SW846 CLP-Like Other:

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

12041

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09-Mar-2015

Dane J. Wacasey  
ALS Environmental  
10450 Stancliff Rd  
Suite 210  
Houston, TX 77099

Re: **HS15030132**

Work Order: **1503253**

Dear Dane,

ALS Environmental received 3 samples on 05-Mar-2015 10:30 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 10.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager



Certificate No: MN 532786

### Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-6283 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company



RIGHT SOLUTIONS. RIGHT PARTNER.

Client: ALS Environmental  
 Project: HS15030132  
 Work Order: 1503253

**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1503253-01	HS15030132-01	Liquid	USOR-EQ-03 L/Blue Horizontal Cylinder	3/3/2015 16:02	3/5/2015 10:30	<input type="checkbox"/>
1503253-02	HS15030132-02	Solid	USOR-EQ-11 Large Blue Hopper	3/3/2015 16:16	3/5/2015 10:30	<input type="checkbox"/>
1503253-03	HS15030132-03	Liquid	Equipment Blank #1	3/3/2015 16:30	3/5/2015 10:30	<input type="checkbox"/>

**Client:** ALS Environmental  
**Project:** HS15030132  
**WorkOrder:** 1503253

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram

**ALS Group USA, Corp**

Date: 09-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030132  
**Sample ID:** HS15030132-01  
**Collection Date:** 3/3/2015 04:02 PM

**Work Order:** 1503253  
**Lab ID:** 1503253-01  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 12:00 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/8/2015 04:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 09-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030132  
**Sample ID:** HS15030132-02  
**Collection Date:** 3/3/2015 04:16 PM

**Work Order:** 1503253  
**Lab ID:** 1503253-02  
**Matrix:** SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 12:00 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/8/2015 04:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 09-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030132  
**Sample ID:** HS15030132-03  
**Collection Date:** 3/3/2015 04:30 PM

**Work Order:** 1503253  
**Lab ID:** 1503253-03  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 12:00 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/8/2015 04:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**Client:** ALS Environmental  
**Work Order:** 1503253  
**Project:** HS15030132

**QC BATCH REPORT**

Batch ID: **R158764** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

<b>MBLK</b>	Sample ID: <b>MB-R158764-R158764</b>				Units: <b>mg/Kg</b>	Analysis Date: <b>3/8/2015 04:00 PM</b>				
Client ID:	Run ID: <b>WETCHEM_150308C</b>			SeqNo: <b>3169544</b>	Prep Date:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfide, Reactive                      ND              100

<b>LCS</b>	Sample ID: <b>LCS-R158764-R158764</b>				Units: <b>mg/Kg</b>	Analysis Date: <b>3/8/2015 04:00 PM</b>				
Client ID:	Run ID: <b>WETCHEM_150308C</b>			SeqNo: <b>3169545</b>	Prep Date:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfide, Reactive                      1512              100              2149              0              70.4              60-120              0

The following samples were analyzed in this batch:      1503253-01A              1503253-02A              1503253-03A

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 1503253  
 Project: HS15030132

# QC BATCH REPORT

Batch ID: **R158765** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK		Sample ID: <b>MB-R158765-R158765</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_150309D</b>		SeqNo: <b>3169553</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS		Sample ID: <b>LCS-R158765-R158765</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 12:00 PM</b>		
Client ID:		Run ID: <b>WETCHEM_150309D</b>		SeqNo: <b>3169554</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	124.8	100	125	0	99.8	75-125	0			

MS		Sample ID: <b>1503253-01A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 12:00 PM</b>		
Client ID: <b>HS15030132-01</b>		Run ID: <b>WETCHEM_150309D</b>		SeqNo: <b>3169562</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	233.9	100	250	0	93.6	50-150	0			

MSD		Sample ID: <b>1503253-01A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 12:00 PM</b>		
Client ID: <b>HS15030132-01</b>		Run ID: <b>WETCHEM_150309D</b>		SeqNo: <b>3169563</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	219.3	100	250	0	87.7	50-150	219.3	0	35	

The following samples were analyzed in this batch: 1503253-01A 1503253-02A 1503253-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



# CHAIN OF CUSTODY RECORD

Page 1 of 1

Date 4 Mar 2015

COC ID 2374

Due date 11 MAR 15

Subcontractor	
ALS Laboratory Group	Phone
3352 128th Ave.	6163998070
Holland, MI 494249263	Fax
	6163998185

Customer Information		Project Information	
PO		Project Name	HS15030132

Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Stanciff Rd, Ste 210	Address	10450 Stanciff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5656	Phone	281-530-5656
Email1	Dane.Wacasey@aisglobal.com	Email2	lumokey.lawak@aisglobal.com

Lab ID	Client Samp ID	Collection Date	Matrix	Analysis Requested
1 HS15030132-01	USOR-EQ-03 L/Blue Horizontal Cylinder	03-Mar-15 04:02 pm	Liquid	RCN_W, RS_W
2 HS15030132-02	USOR-EQ-11-Large Blue Hopper	03-Mar-15 04:16 pm	Solid	RCN_S, RS_S
3 HS15030132-03	Equipment Blank # 1	03-Mar-15 04:30 pm	Liquid	RCN_W, RS_W

Comments Please analyze for the above. send reports to e-mail 1 & 2 above

*(Handwritten signature)*

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report/QC Level
R Giga	03/04/15 18:00	<i>(Signature)</i>	3/5/15 1030		

24°C

Sample Receipt Checklist

Client Name: **ALS - HOUSTON**

Date/Time Received: **05-Mar-15 10:30**

Work Order: **1503253**

Received by: **KRW**

Checklist completed by *Keith Wurenga*  
eSignature

05-Mar-15  
Date

Reviewed by: *Chad Whilton*  
eSignature

05-Mar-15  
Date

Matrices: **Liquid & Solid**

Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<input type="text" value="2.4 C"/>		<input type="text" value="SR2"/>
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<input type="text" value="3/5/2015 12:00:43 PM"/>		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes:

Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_  
 Contacted By: \_\_\_\_\_ Regarding: \_\_\_\_\_

Comments:

CorrectiveAction:



---

10450 Stancliff Rd. Suite 210  
Houston, TX 77099  
T: +1 281 530 5656  
F: +1 281 530 5887  
www.alsglobal.com

March 16, 2015

Hiren Shah  
Effective Environmental Inc.  
9950 Chemical Road  
Pasadena, TX 77507

Work Order: **HS15030179**

Laboratory Results for: **USOR Equ Assessment and Sampling 8181**

Dear Hiren,

ALS Environmental received 14 sample(s) on Mar 05, 2015 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dane Wacasey'.

Generated By: Dayna.Fisher  
Dane J. Wacasey

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030179

**SAMPLE SUMMARY**

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Liquid		04-Mar-2015 07:30	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-02	USOR-EQ-14-ICP Tank B	Liquid		04-Mar-2015 10:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Liquid		04-Mar-2015 10:30	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-04	Field Dup #1	Liquid		04-Mar-2015 10:45	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-05	Equipment Blank # 2	Water		03-Mar-2015 12:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-06	USOR-EQ-13-ICP Tank A	Solid		04-Mar-2015 13:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	Solid		04-Mar-2015 13:30	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Liquid		04-Mar-2015 14:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-09	USOR-EQ-29 Large Rectangular Box	Liquid		04-Mar-2015 14:30	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-10	Trip Blank	Water		04-Mar-2015 00:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-11	Trip Blank 2	Water		04-Mar-2015 00:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-12	Trip Blank 3	Water		04-Mar-2015 00:00	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-13	USOR EQ 1 Heated&Agitated Frac Tank	Solid		04-Mar-2015 07:40	05-Mar-2015 15:05	<input type="checkbox"/>
HS15030179-14	USOR EQ 2 Dissolved Air Flotation Tank	Solid		04-Mar-2015 09:00	05-Mar-2015 15:05	<input type="checkbox"/>

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030179

**CASE NARRATIVE****Work Order Comments**

- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.
- Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.
- The temperature at the time of pH is reported. Please note that all pH results are already normalized to a temperature of 25 °C.

**GCMS Semivolatiles by Method SW1311/8270****Batch ID: 91311**

Sample ID: HS15030179-02

Sample ID: HS15030179-03

Sample ID: HS15030179-04

- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Sample ID: LCSD-91311

- No MS was extracted due to limited sample.

**Batch ID: 91303**

Sample ID: HS15030179-01

Sample ID: HS15030179-06

Sample ID: HS15030179-07

Sample ID: HS15030179-08

Sample ID: HS15030179-09

- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Sample ID: LCSD-91303

- LCSD RPD was above the control limits. The individual recoveries were in control.

**GCMS Semivolatiles by Method SW8270****Batch ID: 91136**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**GCMS Volatiles by Method SW1311/8260B****Batch ID: R250903,R250959**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**GCMS Volatiles by Method SW8260****Batch ID: R250808**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Sample ID: VSTD050

- 2-Butanone exceeded %D limits for CCV, LCS is OK. Samples are ND for these compounds.

**Batch ID: R250710**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW1311/6020****Batch ID: 91289**

Sample ID: HS15030179-02

---

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030179

---

**CASE NARRATIVE**

---

**Metals by Method SW1311/6020**

**Batch ID: 91289**

- Sample ran at a 5x due to internal standard 209 (Pb) failures at a 1x and 2x. High Sodium concentration.

Sample ID: **HS15030179-04**

- Sample ran at a 5x due to internal standard 209 (Pb) and 115 (Ba & Cd) failures at a 1x and 2x. High Sodium concentration.

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**Metals by Method SW7470**

**Batch ID: 91188,91298**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**Metals by Method SW6020**

**Batch ID: 91152**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SW1010**

**Batch ID: R250865**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SW1030**

**Batch ID: R250862**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SW9045B**

**Batch ID: R250705,R250852**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
- 

**WetChemistry by Method SM4500H+ B**

**Batch ID: R250703**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-1-Heated&Agitated Frac Tank  
 Collection Date: 04-Mar-2015 07:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-01  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 16:40
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 16:40
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 16:40
<b>2-Butanone</b>	<b>0.074</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 16:40
Benzene		U	0.012	0.10	mg/L	20	11-Mar-2015 16:40
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 16:40
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 16:40
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 16:40
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 16:40
Trichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 16:40
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 16:40
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>95.4</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:40</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>101</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:40</i>
<i>Surr: Dibromofluoromethane</i>	<i>99.0</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:40</i>
<i>Surr: Toluene-d8</i>	<i>97.5</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:40</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol		U	0.0090	0.050	mg/L	10	11-Mar-2015 16:11
2,4,6-Trichlorophenol		U	0.014	0.050	mg/L	10	11-Mar-2015 16:11
2,4-Dinitrotoluene		U	0.010	0.050	mg/L	10	11-Mar-2015 16:11
<b>Cresols, Total</b>	<b>0.18</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	11-Mar-2015 16:11
Hexachlorobenzene		U	0.011	0.050	mg/L	10	11-Mar-2015 16:11
Hexachlorobutadiene		U	0.011	0.050	mg/L	10	11-Mar-2015 16:11
Hexachloroethane		U	0.010	0.050	mg/L	10	11-Mar-2015 16:11
Nitrobenzene		U	0.0080	0.050	mg/L	10	11-Mar-2015 16:11
Pentachlorophenol		U	0.016	0.050	mg/L	10	11-Mar-2015 16:11
Pyridine		U	0.020	0.050	mg/L	10	11-Mar-2015 16:11
<i>Surr: 2,4,6-Tribromophenol</i>	<i>71.2</i>			<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>88.2</i>			<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>
<i>Surr: 2-Fluorophenol</i>	<i>63.2</i>			<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>81.5</i>			<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>
<i>Surr: Nitrobenzene-d5</i>	<i>80.6</i>			<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>
<i>Surr: Phenol-d6</i>	<i>69.4</i>			<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:11</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-1-Heated&Agitated Frac Tank  
 Collection Date: 04-Mar-2015 07:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-01  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW3010A / 11-Mar-2015	Prep:SW3010A / 11-Mar-2015	Analyst: JDE	
Arsenic	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:31
<b>Barium</b>	<b>0.0684</b>	J	<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	11-Mar-2015 23:31
Cadmium	U		0.00800	0.0500	mg/L	1	11-Mar-2015 23:31
Chromium	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:31
Lead	U		0.00700	0.0500	mg/L	1	11-Mar-2015 23:31
Selenium	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:31
Silver	U		0.00800	0.0500	mg/L	1	11-Mar-2015 23:31
<b>IGNITABILITY</b>		<b>Method:SW1010</b>				Analyst: KAH	
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW3010A / 11-Mar-2015	Prep:SW7470 / 11-Mar-2015	Analyst: OFO	
Mercury	U		0.0000420	0.000200	mg/L	1	11-Mar-2015 15:49
<b>PH SOIL BY SW9045D</b>		<b>Method:SW9045B</b>				Analyst: JHD	
pH	<b>5.45</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	10-Mar-2015 14:28
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>				Analyst: SUB	
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>				Analyst: SUB	
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-14-ICP Tank B  
 Collection Date: 04-Mar-2015 10:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-02  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 15:45
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 15:45
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 15:45
<b>2-Butanone</b>	<b>1.8</b>		<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 15:45
<b>Benzene</b>	<b>0.049</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 15:45
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 15:45
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 15:45
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 15:45
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 15:45
Trichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 15:45
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 15:45
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>95.6</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 15:45</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>98.3</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 15:45</i>
<i>Surr: Dibromofluoromethane</i>	<i>98.4</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 15:45</i>
<i>Surr: Toluene-d8</i>	<i>94.4</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 15:45</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: GEY
2,4,5-Trichlorophenol		U	0.049	0.27	mg/L	10	12-Mar-2015 14:57
2,4,6-Trichlorophenol		U	0.076	0.27	mg/L	10	12-Mar-2015 14:57
2,4-Dinitrotoluene		U	0.055	0.27	mg/L	10	12-Mar-2015 14:57
<b>Cresols, Total</b>	<b>3.8</b>		<b>0.11</b>	<b>0.82</b>	<b>mg/L</b>	10	12-Mar-2015 14:57
Hexachlorobenzene		U	0.060	0.27	mg/L	10	12-Mar-2015 14:57
Hexachlorobutadiene		U	0.060	0.27	mg/L	10	12-Mar-2015 14:57
Hexachloroethane		U	0.055	0.27	mg/L	10	12-Mar-2015 14:57
Nitrobenzene		U	0.044	0.27	mg/L	10	12-Mar-2015 14:57
Pentachlorophenol		U	0.087	0.27	mg/L	10	12-Mar-2015 14:57
Pyridine		U	0.11	0.27	mg/L	10	12-Mar-2015 14:57
<i>Surr: 2,4,6-Tribromophenol</i>	<i>83.4</i>	<i>J</i>		<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>101</i>	<i>J</i>		<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>
<i>Surr: 2-Fluorophenol</i>	<i>35.7</i>	<i>J</i>		<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>88.8</i>	<i>J</i>		<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>
<i>Surr: Nitrobenzene-d5</i>	<i>93.2</i>	<i>J</i>		<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>
<i>Surr: Phenol-d6</i>	<i>87.1</i>	<i>J</i>		<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:57</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-14-ICP Tank B  
 Collection Date: 04-Mar-2015 10:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-02  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		Method:SW1311/6020		Leache:SW3010A / 11-Mar-2015	Prep:SW3010A / 11-Mar-2015	Analyst: JDE	
Arsenic	0.0163	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:36
Barium	0.0649	J	0.00900	0.200	mg/L	1	11-Mar-2015 23:36
Cadmium		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:36
Chromium	1.77		0.0100	0.0500	mg/L	1	11-Mar-2015 23:36
Lead		U	0.0350	0.250	mg/L	5	12-Mar-2015 13:49
Selenium	0.0223	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:36
Silver		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:36
<b>IGNITABILITY</b>		Method:SW1010					Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>		Method:SW7470		Leache:SW1311/6020 / 12-Mar-2015	Prep:SW7470 / 11-Mar-2015	Analyst: OFO	
Mercury	0.00203		0.000168	0.000800	mg/L	1	11-Mar-2015 15:51
<b>PH BY SM4500H+ B</b>		Method:SM4500H+ B					Analyst: JHD
pH	7.45	H	0.100	0.100	pH Units	1	06-Mar-2015 15:33
Temp Deg C @pH	22.4	H	0	0	°C	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b>		Method:SW7.3.3.2					Analyst: SUB
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>		Method:SW7.3.4.2					Analyst: SUB
Reactive Sulfide		U	100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-15 Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 10:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-03  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	11-Mar-2015 16:16
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	11-Mar-2015 16:16
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	11-Mar-2015 16:16
<b>2-Butanone</b>	<b>1.7</b>		<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 16:16
<b>Benzene</b>	<b>0.35</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 16:16
Carbon tetrachloride	U		0.012	0.10	mg/L	20	11-Mar-2015 16:16
Chlorobenzene	U		0.0080	0.10	mg/L	20	11-Mar-2015 16:16
Chloroform	U		0.012	0.10	mg/L	20	11-Mar-2015 16:16
Tetrachloroethene	U		0.012	0.10	mg/L	20	11-Mar-2015 16:16
<b>Trichloroethene</b>	<b>0.026</b>	<b>J</b>	<b>0.010</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 16:16
Vinyl chloride	U		0.0080	0.040	mg/L	20	11-Mar-2015 16:16
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>91.4</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:16</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>99.9</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:16</i>
<i>Surr: Dibromofluoromethane</i>	<i>96.6</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:16</i>
<i>Surr: Toluene-d8</i>	<i>97.3</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 16:16</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: GEY
2,4,5-Trichlorophenol	U		0.049	0.27	mg/L	10	12-Mar-2015 14:12
2,4,6-Trichlorophenol	U		0.076	0.27	mg/L	10	12-Mar-2015 14:12
2,4-Dinitrotoluene	U		0.055	0.27	mg/L	10	12-Mar-2015 14:12
<b>Cresols, Total</b>	<b>3.9</b>		<b>0.11</b>	<b>0.82</b>	<b>mg/L</b>	10	12-Mar-2015 14:12
Hexachlorobenzene	U		0.060	0.27	mg/L	10	12-Mar-2015 14:12
Hexachlorobutadiene	U		0.060	0.27	mg/L	10	12-Mar-2015 14:12
Hexachloroethane	U		0.055	0.27	mg/L	10	12-Mar-2015 14:12
Nitrobenzene	U		0.044	0.27	mg/L	10	12-Mar-2015 14:12
Pentachlorophenol	U		0.087	0.27	mg/L	10	12-Mar-2015 14:12
Pyridine	U		0.11	0.27	mg/L	10	12-Mar-2015 14:12
<i>Surr: 2,4,6-Tribromophenol</i>	<i>87.9</i>	<i>J</i>		<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>87.7</i>	<i>J</i>		<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>
<i>Surr: 2-Fluorophenol</i>	<i>105</i>	<i>J</i>		<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>124</i>	<i>J</i>		<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>
<i>Surr: Nitrobenzene-d5</i>	<i>112</i>	<i>J</i>		<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>
<i>Surr: Phenol-d6</i>	<i>80.4</i>	<i>J</i>		<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 14:12</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-15 Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 10:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-03  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		Method:SW1311/6020		Leache:SW3010A / 11-Mar-2015	Prep:SW3010A / 11-Mar-2015	Analyst: JDE	
Arsenic	0.0212	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:46
Barium	0.140	J	0.00900	0.200	mg/L	1	11-Mar-2015 23:46
Cadmium		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:46
Chromium	0.285		0.0100	0.0500	mg/L	1	11-Mar-2015 23:46
Lead		U	0.00700	0.0500	mg/L	1	11-Mar-2015 23:46
Selenium	0.0113	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:46
Silver		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:46
<b>IGNITABILITY</b>		Method:SW1010					Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>		Method:SW7470		Leache:SW7470 / 11-Mar-2015	Prep:SW7470 / 11-Mar-2015	Analyst: OFO	
Mercury		U	0.000168	0.000800	mg/L	1	11-Mar-2015 15:53
<b>PH BY SM4500H+ B</b>		Method:SM4500H+ B					Analyst: JHD
pH	7.69	H	0.100	0.100	pH Units	1	06-Mar-2015 15:33
Temp Deg C @pH	22.3	H	0	0	°C	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b>		Method:SW7.3.3.2					Analyst: SUB
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>		Method:SW7.3.4.2					Analyst: SUB
Reactive Sulfide		U	100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Field Dup #1  
 Collection Date: 04-Mar-2015 10:45

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-04  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 17:04
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 17:04
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 17:04
<b>2-Butanone</b>	<b>1.9</b>		<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 17:04
<b>Benzene</b>	<b>0.074</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 17:04
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 17:04
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 17:04
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 17:04
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 17:04
Trichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 17:04
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 17:04
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>95.5</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 17:04</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>101</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 17:04</i>
<i>Surr: Dibromofluoromethane</i>	<i>98.5</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 17:04</i>
<i>Surr: Toluene-d8</i>	<i>94.8</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 17:04</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: GEY
2,4,5-Trichlorophenol		U	0.025	0.14	mg/L	10	11-Mar-2015 20:48
2,4,6-Trichlorophenol		U	0.038	0.14	mg/L	10	11-Mar-2015 20:48
2,4-Dinitrotoluene		U	0.027	0.14	mg/L	10	11-Mar-2015 20:48
<b>Cresols, Total</b>	<b>2.8</b>		<b>0.055</b>	<b>0.41</b>	<b>mg/L</b>	10	11-Mar-2015 20:48
Hexachlorobenzene		U	0.030	0.14	mg/L	10	11-Mar-2015 20:48
Hexachlorobutadiene		U	0.030	0.14	mg/L	10	11-Mar-2015 20:48
Hexachloroethane		U	0.027	0.14	mg/L	10	11-Mar-2015 20:48
Nitrobenzene		U	0.022	0.14	mg/L	10	11-Mar-2015 20:48
Pentachlorophenol		U	0.044	0.14	mg/L	10	11-Mar-2015 20:48
Pyridine		U	0.055	0.14	mg/L	10	11-Mar-2015 20:48
<i>Surr: 2,4,6-Tribromophenol</i>	<i>58.9</i>	J		<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>76.3</i>			<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>
<i>Surr: 2-Fluorophenol</i>	<i>41.2</i>	J		<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>67.1</i>	J		<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>
<i>Surr: Nitrobenzene-d5</i>	<i>75.0</i>	J		<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>
<i>Surr: Phenol-d6</i>	<i>42.1</i>	J		<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 20:48</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Field Dup #1  
 Collection Date: 04-Mar-2015 10:45

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-04  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>							
	Method:SW1311/6020		Leache:SW1311 / 10-Mar-2015		Prep:SW3010A / 11-Mar-2015		Analyst: JDE
Arsenic	0.0166	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:41
Barium	U		0.0450	1.00	mg/L	5	12-Mar-2015 13:54
Cadmium	U		0.0400	0.250	mg/L	5	12-Mar-2015 13:54
Chromium	1.88		0.0100	0.0500	mg/L	1	11-Mar-2015 23:41
Lead	U		0.0350	0.250	mg/L	5	12-Mar-2015 13:54
Selenium	0.0236	J	0.0100	0.0500	mg/L	1	11-Mar-2015 23:41
Silver	U		0.00800	0.0500	mg/L	1	11-Mar-2015 23:41
<b>IGNITABILITY</b>							
	Method:SW1010						Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>							
	Method:SW7470		Leache:SW7470 / 11-Mar-2015		Prep:SW7470 / 11-Mar-2015		Analyst: OFO
Mercury	0.00224		0.000168	0.000800	mg/L	1	11-Mar-2015 15:54
<b>PH BY SM4500H+ B</b>							
	Method:SM4500H+ B						Analyst: JHD
pH	7.89	H	0.100	0.100	pH Units	1	06-Mar-2015 15:33
Temp Deg C @pH	22.8	H	0	0	°C	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b>							
	Method:SW7.3.3.2						Analyst: SUB
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>							
	Method:SW7.3.4.2						Analyst: SUB
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Equipment Blank # 2  
 Collection Date: 03-Mar-2015 12:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-05  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>			<b>Method:SW8260</b>			Analyst: PC	
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	10-Mar-2015 05:41
2-Butanone	U		0.00050	0.0020	mg/L	1	10-Mar-2015 05:41
Benzene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	10-Mar-2015 05:41
Chlorobenzene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 05:41
Chloroform	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 05:41
Trichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
Vinyl chloride	U		0.00020	0.0010	mg/L	1	10-Mar-2015 05:41
Surr: 1,2-Dichloroethane-d4	104			71-125	%REC	1	10-Mar-2015 05:41
Surr: 4-Bromofluorobenzene	98.6			70-125	%REC	1	10-Mar-2015 05:41
Surr: Dibromofluoromethane	101			74-125	%REC	1	10-Mar-2015 05:41
Surr: Toluene-d8	108			75-125	%REC	1	10-Mar-2015 05:41
<b>LOW-LEVEL SEMIVOLATILES</b>			<b>Method:SW8270</b>			Prep:SW3510 / 05-Mar-2015 Analyst: LG	
2,4,5-Trichlorophenol	U		0.000038	0.00020	mg/L	1	09-Mar-2015 22:00
2,4,6-Trichlorophenol	U		0.000032	0.00020	mg/L	1	09-Mar-2015 22:00
2,4-Dinitrotoluene	U		0.000039	0.00020	mg/L	1	09-Mar-2015 22:00
<b>2-Methylphenol</b>	<b>0.00015</b>	<b>J</b>	<b>0.000041</b>	<b>0.00020</b>	<b>mg/L</b>	<b>1</b>	<b>09-Mar-2015 22:00</b>
<b>3&amp;4-Methylphenol</b>	<b>0.00027</b>		<b>0.000030</b>	<b>0.00020</b>	<b>mg/L</b>	<b>1</b>	<b>09-Mar-2015 22:00</b>
Hexachlorobenzene	U		0.000039	0.00020	mg/L	1	09-Mar-2015 22:00
Hexachlorobutadiene	U		0.000032	0.00020	mg/L	1	09-Mar-2015 22:00
Hexachloroethane	U		0.000044	0.00020	mg/L	1	09-Mar-2015 22:00
Nitrobenzene	U		0.000033	0.00020	mg/L	1	09-Mar-2015 22:00
Pentachlorophenol	U		0.000053	0.00020	mg/L	1	09-Mar-2015 22:00
Pyridine	U		0.000040	0.0010	mg/L	1	09-Mar-2015 22:00
Surr: 2,4,6-Tribromophenol	55.7			34-129	%REC	1	09-Mar-2015 22:00
Surr: 2-Fluorobiphenyl	56.2			40-125	%REC	1	09-Mar-2015 22:00
Surr: 2-Fluorophenol	55.3			20-120	%REC	1	09-Mar-2015 22:00
Surr: 4-Terphenyl-d14	73.0			40-135	%REC	1	09-Mar-2015 22:00
Surr: Nitrobenzene-d5	60.0			41-120	%REC	1	09-Mar-2015 22:00
Surr: Phenol-d6	60.1			20-120	%REC	1	09-Mar-2015 22:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Equipment Blank # 2  
 Collection Date: 03-Mar-2015 12:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-05  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>ICP-MS METALS BY SW6020A</b>		<b>Method:SW6020</b>				Prep:SW3010A / 06-Mar-2015	Analyst: RPM
Arsenic	U		0.00100	0.00500	mg/L	1	09-Mar-2015 17:14
<b>Barium</b>	<b>0.00901</b>		<b>0.000900</b>	<b>0.00500</b>	<b>mg/L</b>	1	09-Mar-2015 17:14
Cadmium	U		0.000800	0.00200	mg/L	1	09-Mar-2015 17:14
Chromium	U		0.00100	0.00500	mg/L	1	09-Mar-2015 17:14
Lead	U		0.000700	0.00500	mg/L	1	09-Mar-2015 17:14
<b>Selenium</b>	<b>0.00108</b>	J	<b>0.00100</b>	<b>0.00500</b>	<b>mg/L</b>	1	09-Mar-2015 17:14
Silver	U		0.000800	0.00500	mg/L	1	09-Mar-2015 17:14
<b>IGNITABILITY</b>		<b>Method:SW1010</b>					Analyst: KAH
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>MERCURY BY SW7470A</b>		<b>Method:SW7470</b>				Prep:SW7470 / 09-Mar-2015	Analyst: OFO
Mercury	U		0.0000400	0.000200	mg/L	1	09-Mar-2015 14:43
<b>PH BY SM4500H+ B</b>		<b>Method:SM4500H+ B</b>					Analyst: JHD
pH	7.34	H	0.100	0.100	pH Units	1	06-Mar-2015 15:33
Temp Deg C @pH	22.3	H	0	0	°C	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-13-ICP Tank A  
 Collection Date: 04-Mar-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-06  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW1311 / 09-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	10-Mar-2015 19:34
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	10-Mar-2015 19:34
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	10-Mar-2015 19:34
<b>2-Butanone</b>	<b>0.058</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	10-Mar-2015 19:34
<b>Benzene</b>	<b>0.60</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:34
Carbon tetrachloride	U		0.012	0.10	mg/L	20	10-Mar-2015 19:34
Chlorobenzene	U		0.0080	0.10	mg/L	20	10-Mar-2015 19:34
Chloroform	U		0.012	0.10	mg/L	20	10-Mar-2015 19:34
<b>Tetrachloroethene</b>	<b>0.018</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:34
<b>Trichloroethene</b>	<b>0.022</b>	J	<b>0.010</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:34
Vinyl chloride	U		0.0080	0.040	mg/L	20	10-Mar-2015 19:34
<i>Surr: 1,2-Dichloroethane-d4</i>	93.8			70-125	%REC	20	10-Mar-2015 19:34
<i>Surr: 4-Bromofluorobenzene</i>	100			72-125	%REC	20	10-Mar-2015 19:34
<i>Surr: Dibromofluoromethane</i>	96.4			71-125	%REC	20	10-Mar-2015 19:34
<i>Surr: Toluene-d8</i>	97.2			75-125	%REC	20	10-Mar-2015 19:34
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol	U		0.0090	0.050	mg/L	10	11-Mar-2015 15:47
2,4,6-Trichlorophenol	U		0.014	0.050	mg/L	10	11-Mar-2015 15:47
2,4-Dinitrotoluene	U		0.010	0.050	mg/L	10	11-Mar-2015 15:47
<b>Cresols, Total</b>	<b>0.22</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	11-Mar-2015 15:47
Hexachlorobenzene	U		0.011	0.050	mg/L	10	11-Mar-2015 15:47
Hexachlorobutadiene	U		0.011	0.050	mg/L	10	11-Mar-2015 15:47
Hexachloroethane	U		0.010	0.050	mg/L	10	11-Mar-2015 15:47
Nitrobenzene	U		0.0080	0.050	mg/L	10	11-Mar-2015 15:47
Pentachlorophenol	U		0.016	0.050	mg/L	10	11-Mar-2015 15:47
Pyridine	U		0.020	0.050	mg/L	10	11-Mar-2015 15:47
<i>Surr: 2,4,6-Tribromophenol</i>	63.6			39-153	%REC	10	11-Mar-2015 15:47
<i>Surr: 2-Fluorobiphenyl</i>	73.8			40-147	%REC	10	11-Mar-2015 15:47
<i>Surr: 2-Fluorophenol</i>	53.5			21-110	%REC	10	11-Mar-2015 15:47
<i>Surr: 4-Terphenyl-d14</i>	76.5			39-141	%REC	10	11-Mar-2015 15:47
<i>Surr: Nitrobenzene-d5</i>	63.8			37-140	%REC	10	11-Mar-2015 15:47
<i>Surr: Phenol-d6</i>	65.2			11-110	%REC	10	11-Mar-2015 15:47

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-13-ICP Tank A  
 Collection Date: 04-Mar-2015 13:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-06  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b> Method:SW1311/6020 Leache:SW3010A / 11-Mar-2015 Prep:SW3010A / 11-Mar-2015 Analyst: JDE							
Arsenic		U	0.0100	0.0500	mg/L	1	11-Mar-2015 23:50
<b>Barium</b>	<b>0.264</b>		<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	11-Mar-2015 23:50
Cadmium		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:50
Chromium		U	0.0100	0.0500	mg/L	1	11-Mar-2015 23:50
Lead		U	0.00700	0.0500	mg/L	1	11-Mar-2015 23:50
Selenium		U	0.0100	0.0500	mg/L	1	11-Mar-2015 23:50
Silver		U	0.00800	0.0500	mg/L	1	11-Mar-2015 23:50
<b>BURN RATE BY METHOD SW1030</b> Method:SW1030 Analyst: KAH							
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	10-Mar-2015 16:15
<b>TCLP MERCURY BY SW7470A</b> Method:SW7470 Leache:SW7470 / 11-Mar-2015 Prep:SW7470 / 11-Mar-2015 Analyst: OFO							
Mercury	<b>0.0000690</b>	J	<b>0.0000420</b>	<b>0.000200</b>	<b>mg/L</b>	1	11-Mar-2015 15:56
<b>PH SOIL BY SW9045D</b> Method:SW9045B Analyst: JHD							
pH	<b>7.76</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	06-Mar-2015 15:43
<b>REACTIVE CYANIDE</b> Method:SW7.3.3.2 Analyst: SUB							
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b> Method:SW7.3.4.2 Analyst: SUB							
Reactive Sulfide		U	100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-15-Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 13:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-07  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW1311 / 09-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	10-Mar-2015 19:58
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	10-Mar-2015 19:58
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	10-Mar-2015 19:58
<b>2-Butanone</b>	<b>0.050</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	10-Mar-2015 19:58
<b>Benzene</b>	<b>1.7</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:58
Carbon tetrachloride	U		0.012	0.10	mg/L	20	10-Mar-2015 19:58
Chlorobenzene	U		0.0080	0.10	mg/L	20	10-Mar-2015 19:58
Chloroform	U		0.012	0.10	mg/L	20	10-Mar-2015 19:58
<b>Tetrachloroethene</b>	<b>0.030</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:58
<b>Trichloroethene</b>	<b>0.17</b>		<b>0.010</b>	<b>0.10</b>	<b>mg/L</b>	20	10-Mar-2015 19:58
Vinyl chloride	U		0.0080	0.040	mg/L	20	10-Mar-2015 19:58
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>91.2</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>10-Mar-2015 19:58</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>99.3</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>10-Mar-2015 19:58</i>
<i>Surr: Dibromofluoromethane</i>	<i>99.5</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>10-Mar-2015 19:58</i>
<i>Surr: Toluene-d8</i>	<i>97.2</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>10-Mar-2015 19:58</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol	U		0.0090	0.050	mg/L	10	11-Mar-2015 16:34
2,4,6-Trichlorophenol	U		0.014	0.050	mg/L	10	11-Mar-2015 16:34
2,4-Dinitrotoluene	U		0.010	0.050	mg/L	10	11-Mar-2015 16:34
<b>Cresols, Total</b>	<b>0.17</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	11-Mar-2015 16:34
Hexachlorobenzene	U		0.011	0.050	mg/L	10	11-Mar-2015 16:34
Hexachlorobutadiene	U		0.011	0.050	mg/L	10	11-Mar-2015 16:34
Hexachloroethane	U		0.010	0.050	mg/L	10	11-Mar-2015 16:34
Nitrobenzene	U		0.0080	0.050	mg/L	10	11-Mar-2015 16:34
Pentachlorophenol	U		0.016	0.050	mg/L	10	11-Mar-2015 16:34
Pyridine	U		0.020	0.050	mg/L	10	11-Mar-2015 16:34
<i>Surr: 2,4,6-Tribromophenol</i>	<i>62.1</i>			<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>78.1</i>			<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>
<i>Surr: 2-Fluorophenol</i>	<i>67.6</i>			<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>74.4</i>			<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>
<i>Surr: Nitrobenzene-d5</i>	<i>72.0</i>			<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>
<i>Surr: Phenol-d6</i>	<i>67.0</i>			<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 16:34</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-15-Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 13:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-07  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b> Method:SW1311/6020 Leache:SW3010A / 11-Mar-2015 Prep:SW3010A / 11-Mar-2015 Analyst: JDE							
Arsenic	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:55
<b>Barium</b>	<b>0.0901</b>	J	<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	11-Mar-2015 23:55
Cadmium	U		0.00800	0.0500	mg/L	1	11-Mar-2015 23:55
Chromium	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:55
Lead	U		0.00700	0.0500	mg/L	1	11-Mar-2015 23:55
Selenium	U		0.0100	0.0500	mg/L	1	11-Mar-2015 23:55
Silver	U		0.00800	0.0500	mg/L	1	11-Mar-2015 23:55
<b>BURN RATE BY METHOD SW1030</b> Method:SW1030 Analyst: KAH							
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	10-Mar-2015 16:15
<b>TCLP MERCURY BY SW7470A</b> Method:SW7470 Leache:SW7470 / 11-Mar-2015 Prep:SW7470 / 11-Mar-2015 Analyst: OFO							
Mercury	U		0.0000420	0.000200	mg/L	1	11-Mar-2015 15:58
<b>PH SOIL BY SW9045D</b> Method:SW9045B Analyst: JHD							
<b>pH</b>	<b>8.83</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	06-Mar-2015 15:43
<b>REACTIVE CYANIDE</b> Method:SW7.3.3.2 Analyst: SUB							
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b> Method:SW7.3.4.2 Analyst: SUB							
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-12 Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 14:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-08  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	11-Mar-2015 18:40
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	11-Mar-2015 18:40
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	11-Mar-2015 18:40
2-Butanone	U		0.020	0.20	mg/L	20	11-Mar-2015 18:40
Benzene	U		0.012	0.10	mg/L	20	11-Mar-2015 18:40
Carbon tetrachloride	U		0.012	0.10	mg/L	20	11-Mar-2015 18:40
Chlorobenzene	U		0.0080	0.10	mg/L	20	11-Mar-2015 18:40
Chloroform	U		0.012	0.10	mg/L	20	11-Mar-2015 18:40
Tetrachloroethene	U		0.012	0.10	mg/L	20	11-Mar-2015 18:40
Trichloroethene	U		0.010	0.10	mg/L	20	11-Mar-2015 18:40
Vinyl chloride	U		0.0080	0.040	mg/L	20	11-Mar-2015 18:40
Surr: 1,2-Dichloroethane-d4	90.6			70-125	%REC	20	11-Mar-2015 18:40
Surr: 4-Bromofluorobenzene	97.0			72-125	%REC	20	11-Mar-2015 18:40
Surr: Dibromofluoromethane	96.4			71-125	%REC	20	11-Mar-2015 18:40
Surr: Toluene-d8	95.9			75-125	%REC	20	11-Mar-2015 18:40
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol	U		0.0090	0.050	mg/L	10	11-Mar-2015 16:57
2,4,6-Trichlorophenol	U		0.014	0.050	mg/L	10	11-Mar-2015 16:57
2,4-Dinitrotoluene	U		0.010	0.050	mg/L	10	11-Mar-2015 16:57
Cresols, Total	U		0.020	0.15	mg/L	10	11-Mar-2015 16:57
Hexachlorobenzene	U		0.011	0.050	mg/L	10	11-Mar-2015 16:57
Hexachlorobutadiene	U		0.011	0.050	mg/L	10	11-Mar-2015 16:57
Hexachloroethane	U		0.010	0.050	mg/L	10	11-Mar-2015 16:57
Nitrobenzene	U		0.0080	0.050	mg/L	10	11-Mar-2015 16:57
Pentachlorophenol	U		0.016	0.050	mg/L	10	11-Mar-2015 16:57
Pyridine	U		0.020	0.050	mg/L	10	11-Mar-2015 16:57
Surr: 2,4,6-Tribromophenol	55.7			39-153	%REC	10	11-Mar-2015 16:57
Surr: 2-Fluorobiphenyl	63.8			40-147	%REC	10	11-Mar-2015 16:57
Surr: 2-Fluorophenol	46.4	J		21-110	%REC	10	11-Mar-2015 16:57
Surr: 4-Terphenyl-d14	74.7			39-141	%REC	10	11-Mar-2015 16:57
Surr: Nitrobenzene-d5	52.5			37-140	%REC	10	11-Mar-2015 16:57
Surr: Phenol-d6	52.7			11-110	%REC	10	11-Mar-2015 16:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-12 Rectangular Mix Tank  
 Collection Date: 04-Mar-2015 14:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-08  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW3010A / 11-Mar-2015	Prep:SW3010A / 11-Mar-2015	Analyst: JDE	
Arsenic		U	0.0100	0.0500	mg/L	1	12-Mar-2015 00:00
<b>Barium</b>	<b>0.329</b>		<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	12-Mar-2015 00:00
Cadmium		U	0.00800	0.0500	mg/L	1	12-Mar-2015 00:00
Chromium		U	0.0100	0.0500	mg/L	1	12-Mar-2015 00:00
Lead		U	0.00700	0.0500	mg/L	1	12-Mar-2015 00:00
Selenium		U	0.0100	0.0500	mg/L	1	12-Mar-2015 00:00
Silver		U	0.00800	0.0500	mg/L	1	12-Mar-2015 00:00
<b>IGNITABILITY</b>		<b>Method:SW1010</b>				Analyst: KAH	
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW7470 / 11-Mar-2015	Analyst: OFO	
Mercury	<b>0.000477</b>		<b>0.0000420</b>	<b>0.000200</b>	<b>mg/L</b>	1	11-Mar-2015 15:59
<b>PH BY SM4500H+ B</b>		<b>Method:SM4500H+ B</b>				Analyst: JHD	
pH	<b>8.03</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	06-Mar-2015 15:33
Temp Deg C @pH	<b>23.0</b>	H	<b>0</b>	<b>0</b>	<b>°C</b>	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>				Analyst: SUB	
Reactive Cyanide		U	100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>				Analyst: SUB	
Reactive Sulfide		U	100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-29 Large Rectangular Box  
 Collection Date: 04-Mar-2015 14:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-09  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW1311 / 10-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 19:04
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 19:04
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 19:04
<b>2-Butanone</b>	<b>0.035</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 19:04
Benzene		U	0.012	0.10	mg/L	20	11-Mar-2015 19:04
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 19:04
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 19:04
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 19:04
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 19:04
Trichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 19:04
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 19:04
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>92.2</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 19:04</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>96.4</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 19:04</i>
<i>Surr: Dibromofluoromethane</i>	<i>98.9</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 19:04</i>
<i>Surr: Toluene-d8</i>	<i>95.4</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 19:04</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 10-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol		U	0.036	0.20	mg/L	10	11-Mar-2015 18:30
2,4,6-Trichlorophenol		U	0.056	0.20	mg/L	10	11-Mar-2015 18:30
2,4-Dinitrotoluene		U	0.040	0.20	mg/L	10	11-Mar-2015 18:30
Cresols, Total		U	0.080	0.60	mg/L	10	11-Mar-2015 18:30
Hexachlorobenzene		U	0.044	0.20	mg/L	10	11-Mar-2015 18:30
Hexachlorobutadiene		U	0.044	0.20	mg/L	10	11-Mar-2015 18:30
Hexachloroethane		U	0.040	0.20	mg/L	10	11-Mar-2015 18:30
Nitrobenzene		U	0.032	0.20	mg/L	10	11-Mar-2015 18:30
Pentachlorophenol		U	0.064	0.20	mg/L	10	11-Mar-2015 18:30
Pyridine		U	0.080	0.20	mg/L	10	11-Mar-2015 18:30
<i>Surr: 2,4,6-Tribromophenol</i>	<i>70.3</i>	<i>J</i>		<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>92.1</i>	<i>J</i>		<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>
<i>Surr: 2-Fluorophenol</i>	<i>43.9</i>	<i>J</i>		<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>82.6</i>	<i>J</i>		<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>
<i>Surr: Nitrobenzene-d5</i>	<i>72.4</i>	<i>J</i>		<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>
<i>Surr: Phenol-d6</i>	<i>76.5</i>	<i>J</i>		<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 18:30</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: USOR-EQ-29 Large Rectangular Box  
 Collection Date: 04-Mar-2015 14:30

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-09  
 Matrix:Liquid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b> Method:SW1311/6020 Leache:SW3010A / 11-Mar-2015 Prep:SW3010A / 11-Mar-2015 Analyst: JDE							
Arsenic	0.0136	J	0.0100	0.0500	mg/L	1	12-Mar-2015 00:05
Barium	0.741		0.00900	0.200	mg/L	1	12-Mar-2015 00:05
Cadmium	U		0.00800	0.0500	mg/L	1	12-Mar-2015 00:05
Chromium	0.0940		0.0100	0.0500	mg/L	1	12-Mar-2015 00:05
Lead	0.0778		0.00700	0.0500	mg/L	1	12-Mar-2015 00:05
Selenium	U		0.0100	0.0500	mg/L	1	12-Mar-2015 00:05
Silver	U		0.00800	0.0500	mg/L	1	12-Mar-2015 00:05
<b>IGNITABILITY</b> Method:SW1010 Analyst: KAH							
Ignitability	> 212		50.0	50.0	°F	1	10-Mar-2015 16:00
<b>TCLP MERCURY BY SW7470A</b> Method:SW7470 Leache:SW7470 / 11-Mar-2015 Prep:SW7470 / 11-Mar-2015 Analyst: OFO							
Mercury	0.00114		0.000168	0.000800	mg/L	1	11-Mar-2015 16:01
<b>PH BY SM4500H+ B</b> Method:SM4500H+ B Analyst: JHD							
pH	7.52	H	0.100	0.100	pH Units	1	06-Mar-2015 15:33
Temp Deg C @pH	23.0	H	0	0	°C	1	06-Mar-2015 15:33
<b>REACTIVE CYANIDE</b> Method:SW7.3.3.2 Analyst: SUB							
Reactive Cyanide	U		100	100	mg/Kg	1	09-Mar-2015 21:45
<b>REACTIVE SULFIDE</b> Method:SW7.3.4.2 Analyst: SUB							
Reactive Sulfide	U		100	100	mg/Kg	1	09-Mar-2015 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Trip Blank  
 Collection Date: 04-Mar-2015 00:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-10  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>		<b>Method:SW8260</b>					Analyst: PC
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	10-Mar-2015 06:06
2-Butanone	U		0.00050	0.0020	mg/L	1	10-Mar-2015 06:06
Benzene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	10-Mar-2015 06:06
Chlorobenzene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 06:06
Chloroform	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 06:06
Trichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
Vinyl chloride	U		0.00020	0.0010	mg/L	1	10-Mar-2015 06:06
Surr: 1,2-Dichloroethane-d4	106			71-125	%REC	1	10-Mar-2015 06:06
Surr: 4-Bromofluorobenzene	95.5			70-125	%REC	1	10-Mar-2015 06:06
Surr: Dibromofluoromethane	105			74-125	%REC	1	10-Mar-2015 06:06
Surr: Toluene-d8	105			75-125	%REC	1	10-Mar-2015 06:06

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Trip Blank 2  
 Collection Date: 04-Mar-2015 00:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-11  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>		<b>Method:SW8260</b>					Analyst: PC
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	06-Mar-2015 21:37
2-Butanone	U		0.00050	0.0020	mg/L	1	06-Mar-2015 21:37
Benzene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	06-Mar-2015 21:37
Chlorobenzene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 21:37
Chloroform	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 21:37
Trichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
Vinyl chloride	U		0.00020	0.0010	mg/L	1	06-Mar-2015 21:37
Surr: 1,2-Dichloroethane-d4	102			71-125	%REC	1	06-Mar-2015 21:37
Surr: 4-Bromofluorobenzene	93.1			70-125	%REC	1	06-Mar-2015 21:37
Surr: Dibromofluoromethane	101			74-125	%REC	1	06-Mar-2015 21:37
Surr: Toluene-d8	106			75-125	%REC	1	06-Mar-2015 21:37

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Effective Environmental Inc.  
 Project: USOR Equ Assessment and Sampling 8181  
 Sample ID: Trip Blank 3  
 Collection Date: 04-Mar-2015 00:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030179  
 Lab ID:HS15030179-12  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>							Analyst: PC
<b>Method:SW8260</b>							
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	06-Mar-2015 22:02
2-Butanone	U		0.00050	0.0020	mg/L	1	06-Mar-2015 22:02
Benzene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	06-Mar-2015 22:02
Chlorobenzene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 22:02
Chloroform	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	06-Mar-2015 22:02
Trichloroethene	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
Vinyl chloride	U		0.00020	0.0010	mg/L	1	06-Mar-2015 22:02
Surr: 1,2-Dichloroethane-d4	100			71-125	%REC	1	06-Mar-2015 22:02
Surr: 4-Bromofluorobenzene	92.8			70-125	%REC	1	06-Mar-2015 22:02
Surr: Dibromofluoromethane	94.1			74-125	%REC	1	06-Mar-2015 22:02
Surr: Toluene-d8	104			75-125	%REC	1	06-Mar-2015 22:02

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID 91136 Test Name : LOW-LEVEL SEMIVOLATILES Matrix: Water</b>						
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00		05 Mar 2015 13:41	09 Mar 2015 22:00	1
<b>Batch ID 91152 Test Name : ICP-MS METALS BY SW6020A Matrix: Water</b>						
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00		06 Mar 2015 11:00	09 Mar 2015 17:14	1
<b>Batch ID 91188 Test Name : MERCURY BY SW7470A Matrix: Water</b>						
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00		09 Mar 2015 10:05	09 Mar 2015 14:43	1
<b>Batch ID 91289 Test Name : TCLP METALS BY SW6020A Matrix: Solid</b>						
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00	09 Mar 2015 15:11	11 Mar 2015 11:40	11 Mar 2015 23:50	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30	09 Mar 2015 15:11	11 Mar 2015 11:40	11 Mar 2015 23:55	1
<b>Batch ID 91289 Test Name : TCLP METALS BY SW6020A Matrix: Liquid</b>						
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30	10 Mar 2015 17:00	11 Mar 2015 11:40	11 Mar 2015 23:31	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00	10 Mar 2015 17:00	11 Mar 2015 11:40	12 Mar 2015 13:49	5
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00	10 Mar 2015 17:00	11 Mar 2015 11:40	11 Mar 2015 23:36	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30	10 Mar 2015 17:00	11 Mar 2015 11:40	11 Mar 2015 23:46	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45	10 Mar 2015 17:00	11 Mar 2015 11:40	12 Mar 2015 13:54	5
HS15030179-04	Field Dup #1	04 Mar 2015 10:45	10 Mar 2015 17:00	11 Mar 2015 11:40	11 Mar 2015 23:41	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00	10 Mar 2015 17:00	11 Mar 2015 11:40	12 Mar 2015 00:00	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30	10 Mar 2015 17:00	11 Mar 2015 11:40	12 Mar 2015 00:05	1
<b>Batch ID 91298 Test Name : TCLP MERCURY BY SW7470A Matrix: Solid</b>						
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:56	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:58	1
<b>Batch ID 91298 Test Name : TCLP MERCURY BY SW7470A Matrix: Liquid</b>						
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:49	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:51	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:53	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:54	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 15:59	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 16:01	1
<b>Batch ID 91303 Test Name : TCLP SEMIVOLATILES Matrix: Solid</b>						
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00	09 Mar 2015 14:58	11 Mar 2015 11:17	11 Mar 2015 15:47	10
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30	09 Mar 2015 14:58	11 Mar 2015 11:17	11 Mar 2015 16:34	10
<b>Batch ID 91303 Test Name : TCLP SEMIVOLATILES Matrix: Liquid</b>						
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30	10 Mar 2015 17:00	11 Mar 2015 11:17	11 Mar 2015 16:11	10
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00	10 Mar 2015 17:00	11 Mar 2015 11:17	11 Mar 2015 16:57	10
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30	10 Mar 2015 17:00	11 Mar 2015 11:17	11 Mar 2015 18:30	10

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> 91311		<b>Test Name :</b> TCLP SEMIVOLATILES			<b>Matrix:</b> Liquid	
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00	10 Mar 2015 17:00	11 Mar 2015 12:58	12 Mar 2015 14:57	10
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30	10 Mar 2015 17:00	11 Mar 2015 12:58	12 Mar 2015 14:12	10
HS15030179-04	Field Dup #1	04 Mar 2015 10:45	10 Mar 2015 17:00	11 Mar 2015 12:58	11 Mar 2015 20:48	10
<b>Batch ID</b> R250703		<b>Test Name :</b> PH BY SM4500H+ B			<b>Matrix:</b> Water	
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			06 Mar 2015 15:33	1
<b>Batch ID</b> R250703		<b>Test Name :</b> PH BY SM4500H+ B			<b>Matrix:</b> Liquid	
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			06 Mar 2015 15:33	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			06 Mar 2015 15:33	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			06 Mar 2015 15:33	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			06 Mar 2015 15:33	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			06 Mar 2015 15:33	1
<b>Batch ID</b> R250705		<b>Test Name :</b> PH SOIL BY SW9045D			<b>Matrix:</b> Solid	
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00			06 Mar 2015 15:43	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30			06 Mar 2015 15:43	1
<b>Batch ID</b> R250710		<b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C			<b>Matrix:</b> Water	
HS15030179-11	Trip Blank 2	04 Mar 2015 00:00			06 Mar 2015 21:37	1
HS15030179-12	Trip Blank 3	04 Mar 2015 00:00			06 Mar 2015 22:02	1
<b>Batch ID</b> R250808		<b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C			<b>Matrix:</b> Water	
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			10 Mar 2015 05:41	1
HS15030179-10	Trip Blank	04 Mar 2015 00:00			10 Mar 2015 06:06	1
<b>Batch ID</b> R250852		<b>Test Name :</b> PH SOIL BY SW9045D			<b>Matrix:</b> Liquid	
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			10 Mar 2015 14:28	1
<b>Batch ID</b> R250862		<b>Test Name :</b> BURN RATE BY METHOD SW1030			<b>Matrix:</b> Solid	
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00			10 Mar 2015 16:15	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30			10 Mar 2015 16:15	1
<b>Batch ID</b> R250865		<b>Test Name :</b> IGNITABILITY			<b>Matrix:</b> Water	
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			10 Mar 2015 16:00	1
<b>Batch ID</b> R250865		<b>Test Name :</b> IGNITABILITY			<b>Matrix:</b> Liquid	
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			10 Mar 2015 16:00	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			10 Mar 2015 16:00	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			10 Mar 2015 16:00	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			10 Mar 2015 16:00	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			10 Mar 2015 16:00	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			10 Mar 2015 16:00	1

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> R250877		<b>Test Name :</b> REACTIVE CYANIDE		<b>Matrix:</b> Solid		
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00			09 Mar 2015 21:00	1
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00			09 Mar 2015 21:00	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30			09 Mar 2015 21:00	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30			09 Mar 2015 21:00	1
<b>Batch ID</b> R250877		<b>Test Name :</b> REACTIVE SULFIDE		<b>Matrix:</b> Water		
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			09 Mar 2015 21:45	1
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			09 Mar 2015 21:45	1
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			09 Mar 2015 21:00	1
HS15030179-05	Equipment Blank # 2	03 Mar 2015 12:00			09 Mar 2015 21:00	1
<b>Batch ID</b> R250877		<b>Test Name :</b> REACTIVE CYANIDE		<b>Matrix:</b> Liquid		
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			09 Mar 2015 21:45	1
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			09 Mar 2015 21:45	1
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			09 Mar 2015 21:00	1
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30			09 Mar 2015 21:00	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			09 Mar 2015 21:45	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			09 Mar 2015 21:45	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			09 Mar 2015 21:00	1
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00			09 Mar 2015 21:00	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			09 Mar 2015 21:45	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			09 Mar 2015 21:45	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			09 Mar 2015 21:00	1
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30			09 Mar 2015 21:00	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			09 Mar 2015 21:45	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			09 Mar 2015 21:45	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			09 Mar 2015 21:00	1
HS15030179-04	Field Dup #1	04 Mar 2015 10:45			09 Mar 2015 21:00	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			09 Mar 2015 21:45	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			09 Mar 2015 21:45	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			09 Mar 2015 21:00	1
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00			09 Mar 2015 21:00	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			09 Mar 2015 21:45	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			09 Mar 2015 21:45	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			09 Mar 2015 21:00	1
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30			09 Mar 2015 21:00	1

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> R250903		<b>Test Name :</b> TCLP VOLATILES		<b>Matrix:</b> Solid		
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00	09 Mar 2015 17:22	09 Mar 2015 17:22	10 Mar 2015 19:34	20
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30	09 Mar 2015 17:22	09 Mar 2015 17:22	10 Mar 2015 19:58	20
<b>Batch ID</b> R250959		<b>Test Name :</b> TCLP VOLATILES		<b>Matrix:</b> Liquid		
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	04 Mar 2015 07:30	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 16:40	20
HS15030179-02	USOR-EQ-14-ICP Tank B	04 Mar 2015 10:00	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 15:45	20
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04 Mar 2015 10:30	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 16:16	20
HS15030179-04	Field Dup #1	04 Mar 2015 10:45	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 17:04	20
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04 Mar 2015 14:00	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 18:40	20
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04 Mar 2015 14:30	10 Mar 2015 18:30	10 Mar 2015 18:30	11 Mar 2015 19:04	20
<b>Batch ID</b> R251086		<b>Test Name :</b> REACTIVE CYANIDE		<b>Matrix:</b> Solid		
HS15030179-06	USOR-EQ-13-ICP Tank A	04 Mar 2015 13:00			09 Mar 2015 21:45	1
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04 Mar 2015 13:30			09 Mar 2015 21:45	1

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91152      **Instrument:** ICPMS05      **Method:** SW6020

**MBLK**      Sample ID: **MBLK-91152**      Units: **mg/L**      Analysis Date: **09-Mar-2015 14:25**  
 Client ID:      Run ID: **ICPMS05\_250767**      SeqNo: **3207825**      PrepDate: **06-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Arsenic	U	0.00500							
Barium	U	0.00500							
Cadmium	U	0.00200							
Chromium	U	0.00500							
Lead	U	0.00500							
Selenium	U	0.00500							
Silver	U	0.00500							

**LCS**      Sample ID: **MLCS-91152**      Units: **mg/L**      Analysis Date: **09-Mar-2015 14:27**  
 Client ID:      Run ID: **ICPMS05\_250767**      SeqNo: **3207826**      PrepDate: **06-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Arsenic	0.04607	0.00500	0.05	0	92.1	80 - 120			
Barium	0.04911	0.00500	0.05	0	98.2	80 - 120			
Cadmium	0.04751	0.00200	0.05	0	95.0	80 - 120			
Chromium	0.04927	0.00500	0.05	0	98.6	80 - 120			
Lead	0.05208	0.00500	0.05	0	104	80 - 120			
Selenium	0.04857	0.00500	0.05	0	97.1	80 - 120			
Silver	0.05426	0.00500	0.05	0	109	80 - 120			

**MS**      Sample ID: **HS15030161-16MS**      Units: **mg/L**      Analysis Date: **10-Mar-2015 13:19**  
 Client ID:      Run ID: **ICPMS05\_250842**      SeqNo: **3209314**      PrepDate: **06-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Arsenic	0.05423	0.00500	0.05	0.002848	103	80 - 120			
Barium	0.1801	0.00500	0.05	0.1321	96.0	80 - 120			
Cadmium	0.04805	0.00200	0.05	0.000275	95.5	80 - 120			
Chromium	0.05486	0.00500	0.05	0.0036	103	80 - 120			
Lead	0.05017	0.00500	0.05	0.001001	98.3	80 - 120			
Selenium	0.0529	0.00500	0.05	0.001009	104	80 - 120			
Silver	0.04378	0.00500	0.05	0.000054	87.5	80 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91152      **Instrument:** ICPMS05      **Method:** SW6020

<b>MSD</b>		Sample ID: <b>HS15030161-16MSD</b>			Units: <b>mg/L</b>		Analysis Date: <b>10-Mar-2015 13:22</b>			
Client ID:		Run ID: <b>ICPMS05_250842</b>			SeqNo: <b>3209315</b>		PrepDate: <b>06-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05289	0.00500	0.05	0.002848	100	80 - 120	0.05423	2.5	20	
Barium	0.1781	0.00500	0.05	0.1321	92.2	80 - 120	0.1801	1.08	20	
Cadmium	0.04704	0.00200	0.05	0.000275	93.5	80 - 120	0.04805	2.13	20	
Chromium	0.05248	0.00500	0.05	0.0036	97.8	80 - 120	0.05486	4.43	20	
Lead	0.04965	0.00500	0.05	0.001001	97.3	80 - 120	0.05017	1.04	20	
Selenium	0.05181	0.00500	0.05	0.001009	102	80 - 120	0.0529	2.08	20	
Silver	0.04223	0.00500	0.05	0.000054	84.3	80 - 120	0.04378	3.61	20	

<b>DUP</b>		Sample ID: <b>HS15030161-16DUP</b>			Units: <b>mg/L</b>		Analysis Date: <b>10-Mar-2015 13:13</b>			
Client ID:		Run ID: <b>ICPMS05_250842</b>			SeqNo: <b>3209312</b>		PrepDate: <b>06-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.003211	0.00500					0.002848	0	20	J
Barium	0.1305	0.00500					0.1321	1.18	20	
Cadmium	U	0.00200					0.000275	0	20	
Chromium	0.00315	0.00500					0.0036	0	20	J
Lead	0.000998	0.00500					0.001001	0	20	J
Selenium	0.001102	0.00500					0.001009	0	20	J
Silver	U	0.00500					0.000054	0	20	

<b>PDS</b>		Sample ID: <b>HS15030161-16BS</b>			Units: <b>mg/L</b>		Analysis Date: <b>10-Mar-2015 13:25</b>			
Client ID:		Run ID: <b>ICPMS05_250842</b>			SeqNo: <b>3209316</b>		PrepDate: <b>06-Mar-2015</b>		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1	0.00500	0.1	0.002848	97.2	75 - 125				
Barium	0.2238	0.00500	0.1	0.1321	91.8	75 - 125				
Cadmium	0.08939	0.00200	0.1	0.000275	89.1	75 - 125				
Chromium	0.09781	0.00500	0.1	0.0036	94.2	75 - 125				
Lead	0.09382	0.00500	0.1	0.001001	92.8	75 - 125				
Selenium	0.09857	0.00500	0.1	0.001009	97.6	75 - 125				
Silver	0.07927	0.00500	0.1	0.000054	79.2	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91152      **Instrument:** ICPMS05      **Method:** SW6020

SD		Sample ID: HS15030161-16 DIL SX		Units: mg/L		Analysis Date: 10-Mar-2015 13:16				
Client ID:		Run ID: ICPMS05_250842		SeqNo: 3209313		PrepDate: 06-Mar-2015		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0250					0.002848		0	10
Barium	0.1308	0.0250					0.1321	0.97		10
Cadmium	U	0.0100					0.000275		0	10
Chromium	U	0.0250					0.0036		0	10
Lead	U	0.0250					0.001001		0	10
Selenium	U	0.0250					0.001009		0	10
Silver	U	0.0250					0.000054		0	10

The following samples were analyzed in this batch: HS15030179-05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91188		Instrument: HG03		Method: SW7470					
<b>MBLK</b>	Sample ID: <b>GBLKW1-030615</b>	Units: <b>mg/L</b>		Analysis Date: <b>09-Mar-2015 14:01</b>					
Client ID:	Run ID: <b>HG03_250775</b>	SeqNo: <b>3207939</b>		PrepDate: <b>09-Mar-2015</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual	
Mercury	U	0.000200							
<b>LCS</b>	Sample ID: <b>GLCSW1-030615</b>	Units: <b>mg/L</b>		Analysis Date: <b>09-Mar-2015 14:12</b>					
Client ID:	Run ID: <b>HG03_250775</b>	SeqNo: <b>3207940</b>		PrepDate: <b>09-Mar-2015</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual	
Mercury	0.00545	0.000200	0.005	0	109	80 - 124			
<b>MS</b>	Sample ID: <b>HS15030217-01MS</b>	Units: <b>mg/L</b>		Analysis Date: <b>09-Mar-2015 14:31</b>					
Client ID:	Run ID: <b>HG03_250775</b>	SeqNo: <b>3207943</b>		PrepDate: <b>09-Mar-2015</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual	
Mercury	0.00572	0.000200	0.005	0.000594	103	80 - 124			
<b>MSD</b>	Sample ID: <b>HS15030217-01MSD</b>	Units: <b>mg/L</b>		Analysis Date: <b>09-Mar-2015 14:33</b>					
Client ID:	Run ID: <b>HG03_250775</b>	SeqNo: <b>3207944</b>		PrepDate: <b>09-Mar-2015</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual	
Mercury	0.00573	0.000200	0.005	0.000594	103	80 - 124	0.00572	0.175 20	
<b>DUP</b>	Sample ID: <b>HS15030217-01DUP</b>	Units: <b>mg/L</b>		Analysis Date: <b>09-Mar-2015 14:15</b>					
Client ID:	Run ID: <b>HG03_250775</b>	SeqNo: <b>3207942</b>		PrepDate: <b>09-Mar-2015</b>		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD Limit Qual	
Mercury	0.000601	0.000200					0.000594	1.17 20	

The following samples were analyzed in this batch: HS15030179-05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

<b>Batch ID:</b> 91289	<b>Instrument:</b> ICPMS04	<b>Method:</b> SW1311/6020								
<b>MBLK</b>	Sample ID: <b>MBLKT1-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:34</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211211</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.0500								
Barium	0.03256	0.200								J
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

<b>MBLK</b>	Sample ID: <b>MBLK-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:39</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211212</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.00500								
Barium	U	0.0200								
Cadmium	U	0.00500								
Chromium	U	0.00500								
Lead	U	0.00500								
Selenium	U	0.00500								
Silver	U	0.00500								

<b>LCS</b>	Sample ID: <b>MLCS-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:44</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211213</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	0.04865	0.00500	0.05	0	97.3	80 - 120				
Barium	0.04923	0.0200	0.05	0	98.5	80 - 120				
Cadmium	0.0503	0.00500	0.05	0	101	80 - 120				
Chromium	0.04814	0.00500	0.05	0	96.3	80 - 120				
Lead	0.04793	0.00500	0.05	0	95.9	80 - 120				
Selenium	0.04882	0.00500	0.05	0	97.6	80 - 120				
Silver	0.05031	0.00500	0.05	0	101	80 - 120				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91289		Instrument: ICPMS04			Method: SW1311/6020					
<b>MS</b>		Sample ID: HS15030206-01MS			Units: mg/L		Analysis Date: 11-Mar-2015 23:03			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211217		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.526	0.0500	0.5	0.01794	102	80 - 120				
Barium	1.102	0.200	0.5	0.6276	94.9	80 - 120				
Cadmium	0.5072	0.0500	0.5	0.00033	101	80 - 120				
Chromium	0.4891	0.0500	0.5	0.00523	96.8	80 - 120				
Lead	0.4826	0.0500	0.5	0.00221	96.1	80 - 120				
Selenium	0.5412	0.0500	0.5	0.01184	106	80 - 120				
Silver	0.4844	0.0500	0.5	-0.00047	97.0	80 - 120				
<b>MSD</b>		Sample ID: HS15030206-01MSD			Units: mg/L		Analysis Date: 11-Mar-2015 23:08			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211218		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5094	0.0500	0.5	0.01794	98.3	80 - 120	0.526	3.21	20	
Barium	1.087	0.200	0.5	0.6276	91.9	80 - 120	1.102	1.37	20	
Cadmium	0.5066	0.0500	0.5	0.00033	101	80 - 120	0.5072	0.118	20	
Chromium	0.4727	0.0500	0.5	0.00523	93.5	80 - 120	0.4891	3.41	20	
Lead	0.4773	0.0500	0.5	0.00221	95.0	80 - 120	0.4826	1.11	20	
Selenium	0.5256	0.0500	0.5	0.01184	103	80 - 120	0.5412	2.93	20	
Silver	0.4767	0.0500	0.5	-0.00047	95.4	80 - 120	0.4844	1.61	20	
<b>DUP</b>		Sample ID: HS15030206-01DUP			Units: mg/L		Analysis Date: 11-Mar-2015 22:53			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211215		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.01775	0.0500					0.01794	0	25	J
Barium	0.5902	0.200					0.6276	6.15	25	
Cadmium	U	0.0500					0.00033	0	25	
Chromium	U	0.0500					0.00523	0	25	
Lead	U	0.0500					0.00221	0	25	
Selenium	0.01241	0.0500					0.01184	0	25	J
Silver	U	0.0500					-0.00047	0	25	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91289      **Instrument:** ICPMS04      **Method:** SW1311/6020

PDS		Sample ID: HS15030206-01BS			Units: mg/L		Analysis Date: 11-Mar-2015 23:12			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211219		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.9837	0.0500	1	0.01794	96.6	75 - 125				
Barium	1.568	0.200	1	0.6276	94.1	75 - 125				
Cadmium	0.9826	0.0500	1	0.00033	98.2	75 - 125				
Chromium	0.9375	0.0500	1	0.00523	93.2	75 - 125				
Lead	0.9756	0.0500	1	0.00221	97.3	75 - 125				
Selenium	1.023	0.0500	1	0.01184	101	75 - 125				
Silver	0.9523	0.0500	1	-0.00047	95.3	75 - 125				

SD		Sample ID: HS15030206-01 DIL SX			Units: mg/L		Analysis Date: 11-Mar-2015 22:58			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211216		PrepDate: 11-Mar-2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.01794		0	10
Barium	0.6024	1.00					0.6276		0	10 J
Cadmium	U	0.250					0.00033		0	10
Chromium	U	0.250					0.00523		0	10
Lead	U	0.250					0.00221		0	10
Selenium	U	0.250					0.01184		0	10
Silver	U	0.250					-0.00047		0	10

The following samples were analyzed in this batch: HS15030179-01 HS15030179-02 HS15030179-03 HS15030179-04  
 HS15030179-06 HS15030179-07 HS15030179-08 HS15030179-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91298      **Instrument:** HG03      **Method:** SW7470

**MBLK**      Sample ID: **GBLKW1-031115**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:19**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210687**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      U      0.000200

**MBLK**      Sample ID: **GBLKT1-031015**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:33**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210695**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      U      0.000200

**LCS**      Sample ID: **GLCSW1-031115**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:21**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210688**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      0.00517      0.000200      0.005      0      103      80 - 120

**MS**      Sample ID: **HS15030213-01MS**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:26**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210691**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      0.00504      0.000200      0.005      0.000013      101      75 - 125

**MSD**      Sample ID: **HS15030213-01MSD**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:28**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210692**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      0.00532      0.000200      0.005      0.000013      106      75 - 125      0.00504      5.41      20

**DUP**      Sample ID: **HS15030213-01DUP**      Units: **mg/L**      Analysis Date: **11-Mar-2015 13:24**  
 Client ID:      Run ID: **HG03\_250932**      SeqNo: **3210690**      PrepDate: **11-Mar-2015**      DF: **1**  
 Analyte      Result      PQL      SPK Val      SPK Ref Value      %REC      Control Limit      RPD Ref Value      %RPD      RPD Limit Qual

Mercury      U      0.000200      0.000013      0      20

**The following samples were analyzed in this batch:** HS15030179-01      HS15030179-02      HS15030179-03      HS15030179-04  
 HS15030179-06      HS15030179-07      HS15030179-08      HS15030179-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91136      **Instrument:** SV-6      **Method:** SW8270

MBLK		Sample ID: MBLK-91136		Units: ug/L		Analysis Date: 05-Mar-2015 14:54			
Client ID:		Run ID: SV-6_250768		SeqNo: 3207772		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual
2,4,5-Trichlorophenol	U	0.20							
2,4,6-Trichlorophenol	U	0.20							
2,4-Dinitrotoluene	U	0.20							
2-Methylphenol	U	0.20							
3&4-Methylphenol	U	0.20							
Hexachlorobenzene	U	0.20							
Hexachlorobutadiene	U	0.20							
Hexachloroethane	U	0.20							
Nitrobenzene	U	0.20							
Pentachlorophenol	U	0.20							
Pyridine	U	1.0							
<i>Surr: 2,4,6-Tribromophenol</i>	2.761	0.20	5	0	55.2	34 - 129			
<i>Surr: 2-Fluorobiphenyl</i>	3.448	0.20	5	0	69.0	40 - 125			
<i>Surr: 2-Fluorophenol</i>	3.733	0.20	5	0	74.7	20 - 120			
<i>Surr: 4-Terphenyl-d14</i>	4.218	0.20	5	0	84.4	40 - 135			
<i>Surr: Nitrobenzene-d5</i>	3.922	0.20	5	0	78.4	41 - 120			
<i>Surr: Phenol-d6</i>	3.753	0.20	5	0	75.1	20 - 120			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
<b>LCS</b>	Sample ID: <b>LCS-91136</b>	Units: <b>ug/L</b>			Analysis Date: <b>05-Mar-2015 15:13</b>					
Client ID:	Run ID: <b>SV-6_250768</b>	SeqNo: <b>3207773</b>		PrepDate: <b>05-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	3.743	0.20	5	0	74.9	46 - 120				
2,4,6-Trichlorophenol	3.722	0.20	5	0	74.4	42 - 120				
2,4-Dinitrotoluene	4.127	0.20	5	0	82.5	50 - 122				
2-Methylphenol	3.789	0.20	5	0	75.8	45 - 120				
3&4-Methylphenol	3.774	0.20	5	0	75.5	35 - 120				
Hexachlorobenzene	3.158	0.20	5	0	63.2	48 - 120				
Hexachlorobutadiene	3.271	0.20	5	0	65.4	40 - 120				
Hexachloroethane	3.882	0.20	5	0	77.6	40 - 120				
Nitrobenzene	4.156	0.20	5	0	83.1	44 - 120				
Pentachlorophenol	3.493	0.20	5	0	69.9	19 - 121				
Pyridine	3.731	1.0	5	0	74.6	15 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>3.415</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>68.3</i>	<i>34 - 129</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.844</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>76.9</i>	<i>40 - 125</i>				
<i>Surr: 2-Fluorophenol</i>	<i>4.249</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.0</i>	<i>20 - 120</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>4.66</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>93.2</i>	<i>40 - 135</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>4.335</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>86.7</i>	<i>41 - 120</i>				
<i>Surr: Phenol-d6</i>	<i>4.267</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.3</i>	<i>20 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
LCSD		Sample ID: LCSD-91136		Units: ug/L		Analysis Date: 05-Mar-2015 15:33				
Client ID:		Run ID: SV-6_250768		SeqNo: 3207774		PrepDate: 05-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3.691	0.20	5	0	73.8	46 - 120	3.743	1.41	20	
2,4,6-Trichlorophenol	3.266	0.20	5	0	65.3	42 - 120	3.722	13.1	20	
2,4-Dinitrotoluene	3.642	0.20	5	0	72.8	50 - 122	4.127	12.5	20	
2-Methylphenol	3.588	0.20	5	0	71.8	45 - 120	3.789	5.45	20	
3&4-Methylphenol	3.571	0.20	5	0	71.4	35 - 120	3.774	5.53	20	
Hexachlorobenzene	2.919	0.20	5	0	58.4	48 - 120	3.158	7.87	20	
Hexachlorobutadiene	3.188	0.20	5	0	63.8	40 - 120	3.271	2.59	20	
Hexachloroethane	3.76	0.20	5	0	75.2	40 - 120	3.882	3.2	20	
Nitrobenzene	4.082	0.20	5	0	81.6	44 - 120	4.156	1.8	20	
Pentachlorophenol	3.047	0.20	5	0	60.9	19 - 121	3.493	13.6	20	
Pyridine	3.389	1.0	5	0	67.8	15 - 120	3.731	9.6	20	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>2.919</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>58.4</i>	<i>34 - 129</i>	<i>3.415</i>	<i>15.7</i>		
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.531</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>70.6</i>	<i>40 - 125</i>	<i>3.844</i>	<i>8.48</i>		
<i>Surr: 2-Fluorophenol</i>	<i>3.939</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>78.8</i>	<i>20 - 120</i>	<i>4.249</i>	<i>7.57</i>		
<i>Surr: 4-Terphenyl-d14</i>	<i>4.289</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>85.8</i>	<i>40 - 135</i>	<i>4.66</i>	<i>8.28</i>		
<i>Surr: Nitrobenzene-d5</i>	<i>4.102</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>82.0</i>	<i>41 - 120</i>	<i>4.335</i>	<i>5.53</i>		
<i>Surr: Phenol-d6</i>	<i>3.992</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>79.8</i>	<i>20 - 120</i>	<i>4.267</i>	<i>6.65</i>		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91136		Instrument: SV-6		Method: SW8270						
MS		Sample ID: HS15030113-05MS		Units: ug/L		Analysis Date: 05-Mar-2015 16:12				
Client ID:		Run ID: SV-6_250768		SeqNo: 3207816		PrepDate: 05-Mar-2015		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	3.49	0.20	5	0	69.8	46 - 120				
2,4,6-Trichlorophenol	3.312	0.20	5	0	66.2	42 - 120				
2,4-Dinitrotoluene	3.823	0.20	5	0	76.5	50 - 122				
2-Methylphenol	3.501	0.20	5	0	70.0	45 - 120				
3&4-Methylphenol	3.918	0.20	5	0	78.4	35 - 120				
Hexachlorobenzene	2.921	0.20	5	0	58.4	48 - 120				
Hexachlorobutadiene	2.92	0.20	5	0	58.4	40 - 120				
Hexachloroethane	3.572	0.20	5	0	71.4	40 - 120				
Nitrobenzene	3.881	0.20	5	0	77.6	44 - 120				
Pentachlorophenol	3.364	0.20	5	0	67.3	19 - 121				
Pyridine	3.469	1.0	5	0	69.4	15 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>3.021</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>60.4</i>	<i>34 - 129</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>3.437</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>68.7</i>	<i>40 - 125</i>				
<i>Surr: 2-Fluorophenol</i>	<i>3.679</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>73.6</i>	<i>20 - 120</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>4.757</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>95.1</i>	<i>40 - 135</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>3.939</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>78.8</i>	<i>41 - 120</i>				
<i>Surr: Phenol-d6</i>	<i>3.802</i>	<i>0.20</i>	<i>5</i>	<i>0</i>	<i>76.0</i>	<i>20 - 120</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91136      **Instrument:** SV-6      **Method:** SW8270

MSD		Sample ID: HS15030113-05MSD			Units: ug/L		Analysis Date: 05-Mar-2015 16:31			
Client ID:		Run ID: SV-6_250768			SeqNo: 3207817		PrepDate: 05-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	3.8	0.20	5	0	76.0	46 - 120	3.49	8.51	20	
2,4,6-Trichlorophenol	3.442	0.20	5	0	68.8	42 - 120	3.312	3.84	20	
2,4-Dinitrotoluene	4.009	0.20	5	0	80.2	50 - 122	3.823	4.76	20	
2-Methylphenol	3.65	0.20	5	0	73.0	45 - 120	3.501	4.16	20	
3&4-Methylphenol	4.117	0.20	5	0	82.3	35 - 120	3.918	4.96	20	
Hexachlorobenzene	3.021	0.20	5	0	60.4	48 - 120	2.921	3.36	20	
Hexachlorobutadiene	3.04	0.20	5	0	60.8	40 - 120	2.92	4.05	20	
Hexachloroethane	3.688	0.20	5	0	73.8	40 - 120	3.572	3.22	20	
Nitrobenzene	4.018	0.20	5	0	80.4	44 - 120	3.881	3.46	20	
Pentachlorophenol	3.3	0.20	5	0	66.0	19 - 121	3.364	1.93	20	
Pyridine	3.599	1.0	5	0	72.0	15 - 120	3.469	3.68	20	
<i>Surr: 2,4,6-Tribromophenol</i>	3.229	0.20	5	0	64.6	34 - 129	3.021	6.64		
<i>Surr: 2-Fluorobiphenyl</i>	3.504	0.20	5	0	70.1	40 - 125	3.437	1.93		
<i>Surr: 2-Fluorophenol</i>	3.809	0.20	5	0	76.2	20 - 120	3.679	3.47		
<i>Surr: 4-Terphenyl-d14</i>	4.573	0.20	5	0	91.5	40 - 135	4.757	3.95		
<i>Surr: Nitrobenzene-d5</i>	3.994	0.20	5	0	79.9	41 - 120	3.939	1.39		
<i>Surr: Phenol-d6</i>	3.88	0.20	5	0	77.6	20 - 120	3.802	2.03		

The following samples were analyzed in this batch: HS15030179-05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

<b>Batch ID:</b> 91303	<b>Instrument:</b> SV-5	<b>Method:</b> SW1311/8270								
<b>MBLK</b>	Sample ID: <b>MBLK-91303</b>	Units: <b>ug/L</b>	Analysis Date: <b>11-Mar-2015 15:37</b>							
<b>Client ID:</b>	Run ID: <b>SV-5_250960</b>	SeqNo: <b>3211369</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>SPK Val</b>	<b>SPK Ref Value</b>	<b>%REC</b>	<b>Control Limit</b>	<b>RPD Ref Value</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Qual</b>

2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>74.14</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>74.1</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>71.5</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>71.5</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>73.72</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>73.7</i>	<i>21 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>76.74</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.7</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>73.91</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>73.9</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>86.3</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>86.3</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91303		Instrument: SV-5		Method: SW1311/8270						
LCS	Sample ID: LCS-91303	Units: ug/L			Analysis Date: 11-Mar-2015 16:22					
Client ID:	Run ID: SV-5_250960	SeqNo: 3211370	PrepDate: 11-Mar-2015	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	95.47	5.0	100	0	95.5	55 - 120				
2,4,6-Trichlorophenol	95.13	5.0	100	0	95.1	55 - 120				
2,4-Dinitrotoluene	48.24	5.0	50	0	96.5	55 - 125				
Cresols, Total	221.4	15	250	0	88.6	40 - 120				
Hexachlorobenzene	45.05	5.0	50	0	90.1	55 - 120				
Hexachlorobutadiene	39.2	5.0	50	0	78.4	55 - 120				
Hexachloroethane	40.41	5.0	50	0	80.8	55 - 120				
Nitrobenzene	42.03	5.0	50	0	84.1	55 - 120				
Pentachlorophenol	86.34	5.0	100	0	86.3	50 - 135				
Pyridine	31.99	5.0	50	0	64.0	30 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>101.9</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>88.07</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.1</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>88.83</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.8</i>	<i>20 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>81.34</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>81.3</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>79.55</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>79.5</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>93.19</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>93.2</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91303		Instrument: SV-5		Method: SW1311/8270						
<b>LCSD</b>	Sample ID: <b>LCSD-91303</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 17:33</b>					
Client ID:	Run ID: <b>SV-5_250960</b>	SeqNo: <b>3211371</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	90.62	5.0	100	0	90.6	55 - 120	95.47	5.21	25	
2,4,6-Trichlorophenol	97.48	5.0	100	0	97.5	55 - 120	95.13	2.44	25	
2,4-Dinitrotoluene	37.73	5.0	50	0	75.5	55 - 125	48.24	24.5	25	
Cresols, Total	208.8	15	250	0	83.5	40 - 120	221.4	5.87	25	
Hexachlorobenzene	45.93	5.0	50	0	91.9	55 - 120	45.05	1.93	25	
Hexachlorobutadiene	39.63	5.0	50	0	79.3	55 - 120	39.2	1.07	25	
Hexachloroethane	39.39	5.0	50	0	78.8	55 - 120	40.41	2.54	25	
Nitrobenzene	42.9	5.0	50	0	85.8	55 - 120	42.03	2.06	25	
Pentachlorophenol	91.3	5.0	100	0	91.3	50 - 135	86.34	5.58	25	
Pyridine	31.1	5.0	50	0	62.2	30 - 120	31.99	2.82	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>72.04</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>72.0</i>	<i>39 - 153</i>	<i>101.9</i>	<i>34.3</i>	<i>25</i>	<i>R</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>83.07</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.1</i>	<i>40 - 147</i>	<i>88.07</i>	<i>5.84</i>	<i>25</i>	
<i>Surr: 2-Fluorophenol</i>	<i>76.12</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.1</i>	<i>21 - 110</i>	<i>88.83</i>	<i>15.4</i>	<i>25</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>55.94</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>55.9</i>	<i>39 - 141</i>	<i>81.34</i>	<i>37</i>	<i>25</i>	<i>R</i>
<i>Surr: Nitrobenzene-d5</i>	<i>83.92</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.9</i>	<i>37 - 140</i>	<i>79.55</i>	<i>5.35</i>	<i>25</i>	
<i>Surr: Phenol-d6</i>	<i>89.17</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>89.2</i>	<i>11 - 110</i>	<i>93.19</i>	<i>4.42</i>	<i>25</i>	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91303      **Instrument:** SV-5      **Method:** SW1311/8270

MS	Sample ID: HS15030192-01MS	Units: ug/L			Analysis Date: 12-Mar-2015 12:19					
Client ID:	Run ID: SV-5_250960	SeqNo: 3211555	PrepDate: 11-Mar-2015	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	101	5.0	100	0	101	55 - 120				
2,4,6-Trichlorophenol	106.8	5.0	100	0	107	55 - 120				
2,4-Dinitrotoluene	42.69	5.0	50	0	85.4	55 - 125				
Cresols, Total	213.7	15	250	0	85.5	40 - 120				
Hexachlorobenzene	50.16	5.0	50	0	100	55 - 120				
Hexachlorobutadiene	39.9	5.0	50	0	79.8	55 - 120				
Hexachloroethane	37.73	5.0	50	0	75.5	55 - 120				
Nitrobenzene	41.92	5.0	50	0	83.8	55 - 120				
Pentachlorophenol	96.31	5.0	100	0	96.3	50 - 135				
Pyridine	40.35	5.0	50	0	80.7	30 - 120				
Surr: 2,4,6-Tribromophenol	109.6	5.0	100	0	110	39 - 153				
Surr: 2-Fluorobiphenyl	94.37	5.0	100	0	94.4	40 - 147				
Surr: 2-Fluorophenol	97.01	5.0	100	0	97.0	21 - 110				
Surr: 4-Terphenyl-d14	77.69	5.0	100	0	77.7	39 - 141				
Surr: Nitrobenzene-d5	81.87	5.0	100	0	81.9	37 - 140				
Surr: Phenol-d6	99.69	5.0	100	0	99.7	11 - 110				

The following samples were analyzed in this batch: HS15030179-01    HS15030179-06    HS15030179-07    HS15030179-08  
 HS15030179-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

<b>Batch ID:</b> 91311	<b>Instrument:</b> SV-5	<b>Method:</b> SW1311/8270								
<b>MBLK</b>	Sample ID: <b>MBLK-91311</b>	Units: <b>ug/L</b>	Analysis Date: <b>11-Mar-2015 13:22</b>							
<b>Client ID:</b>	Run ID: <b>SV-5_250964</b>	SeqNo: <b>3211426</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
<b>Analyte</b>	<b>Result</b>	<b>PQL</b>	<b>SPK Val</b>	<b>SPK Ref Value</b>	<b>%REC</b>	<b>Control Limit</b>	<b>RPD Ref Value</b>	<b>%RPD</b>	<b>RPD Limit</b>	<b>Qual</b>

2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>88.8</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.8</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>75.67</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>75.7</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>76.89</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.9</i>	<i>21 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>90.73</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>90.7</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>83.58</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.6</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>81.09</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>81.1</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: 91311		Instrument: SV-5		Method: SW1311/8270						
<b>LCS</b>	Sample ID: <b>LCS-91311</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 13:44</b>					
Client ID:	Run ID: <b>SV-5_250964</b>	SeqNo: <b>3211427</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	81.74	5.0	100	0	81.7	55 - 120				
2,4,6-Trichlorophenol	84.95	5.0	100	0	85.0	55 - 120				
2,4-Dinitrotoluene	47.14	5.0	50	0	94.3	55 - 125				
Cresols, Total	204.1	15	250	0	81.6	40 - 120				
Hexachlorobenzene	44.67	5.0	50	0	89.3	55 - 120				
Hexachlorobutadiene	44.98	5.0	50	0	90.0	55 - 120				
Hexachloroethane	34.84	5.0	50	0	69.7	55 - 120				
Nitrobenzene	43.93	5.0	50	0	87.9	55 - 120				
Pentachlorophenol	90.95	5.0	100	0	90.9	50 - 135				
Pyridine	32.89	5.0	50	0	65.8	30 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>90.97</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>91.0</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>74.37</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>74.4</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>83.32</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.3</i>	<i>20 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>78.19</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>78.2</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>86.6</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>86.6</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>91.24</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>91.2</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** 91311      **Instrument:** SV-5      **Method:** SW1311/8270

LCSD	Sample ID: LCSD-91311	Units: ug/L			Analysis Date: 11-Mar-2015 14:07					
Client ID:	Run ID: SV-5_250964	SeqNo: 3211428	PrepDate: 11-Mar-2015	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	95.42	5.0	100	0	95.4	55 - 120	81.74	15.4	25	
2,4,6-Trichlorophenol	99.61	5.0	100	0	99.6	55 - 120	84.95	15.9	25	
2,4-Dinitrotoluene	44.29	5.0	50	0	88.6	55 - 125	47.14	6.25	25	
Cresols, Total	199.3	15	250	0	79.7	40 - 120	204.1	2.36	25	
Hexachlorobenzene	46.67	5.0	50	0	93.3	55 - 120	44.67	4.39	25	
Hexachlorobutadiene	43.91	5.0	50	0	87.8	55 - 120	44.98	2.42	25	
Hexachloroethane	36.67	5.0	50	0	73.3	55 - 120	34.84	5.1	25	
Nitrobenzene	47.51	5.0	50	0	95.0	55 - 120	43.93	7.83	25	
Pentachlorophenol	92.29	5.0	100	0	92.3	50 - 135	90.95	1.47	25	
Pyridine	30.8	5.0	50	0	61.6	30 - 120	32.89	6.58	25	
Surr: 2,4,6-Tribromophenol	99.36	5.0	100	0	99.4	39 - 153	90.97	8.81	25	
Surr: 2-Fluorobiphenyl	87.64	5.0	100	0	87.6	40 - 147	74.37	16.4	25	
Surr: 2-Fluorophenol	81.9	5.0	100	0	81.9	21 - 110	83.32	1.72	25	
Surr: 4-Terphenyl-d14	79.26	5.0	100	0	79.3	39 - 141	78.19	1.37	25	
Surr: Nitrobenzene-d5	88.14	5.0	100	0	88.1	37 - 140	86.6	1.77	25	
Surr: Phenol-d6	84.99	5.0	100	0	85.0	11 - 110	91.24	7.09	25	

The following samples were analyzed in this batch: HS15030179-02      HS15030179-03      HS15030179-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250710      **Instrument:** VOA4      **Method:** SW8260

MBLK	Sample ID: VBLKW-150305	Units: ug/L		Analysis Date: 06-Mar-2015 12:21						
Client ID:	Run ID: VOA4_250710	SeqNo: 3206437	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.34</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.6</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>99.2</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>51.14</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>54.87</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>110</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250710		Instrument: VOA4		Method: SW8260						
<b>LCS</b>	Sample ID: <b>VLCSW-150305</b>	Units: <b>ug/L</b>			Analysis Date: <b>06-Mar-2015 11:29</b>					
Client ID:	Run ID: <b>VOA4_250710</b>	SeqNo: <b>3206436</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	48.99	1.0	50	0	98.0	75 - 130				
1,2-Dichloroethane	51.09	1.0	50	0	102	76 - 120				
1,4-Dichlorobenzene	47.79	1.0	50	0	95.6	80 - 120				
2-Butanone	104.1	2.0	100	0	104	60 - 140				
Benzene	49.52	1.0	50	0	99.0	80 - 120				
Carbon tetrachloride	45.71	1.0	50	0	91.4	75 - 125				
Chlorobenzene	49	1.0	50	0	98.0	80 - 120				
Chloroform	50.66	1.0	50	0	101	70 - 130				
Tetrachloroethene	47.04	1.0	50	0	94.1	75 - 130				
Trichloroethene	49.62	1.0	50	0	99.2	71 - 125				
Vinyl chloride	52.44	1.0	50	0	105	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.55</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.25</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>53.22</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>51.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250710		Instrument: VOA4		Method: SW8260						
<b>MS</b>	Sample ID: <b>HS15030137-02MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>06-Mar-2015 14:54</b>					
Client ID:	Run ID: <b>VOA4_250710</b>	SeqNo: <b>3206446</b>		PrepDate:			DF: <b>10</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	525.3	10	500	0	105	75 - 130				
1,2-Dichloroethane	534	10	500	0	107	76 - 120				
1,4-Dichlorobenzene	487.9	10	500	0	97.6	80 - 120				
2-Butanone	1050	20	1000	0	105	60 - 140				
Benzene	534.8	10	500	7.968	105	80 - 120				
Carbon tetrachloride	486.8	10	500	0	97.4	79 - 120				
Chlorobenzene	510.1	10	500	0	102	80 - 120				
Chloroform	500.7	10	500	0	100	70 - 130				
Tetrachloroethene	511.7	10	500	0	102	75 - 130				
Trichloroethene	525.8	10	500	0	105	71 - 125				
Vinyl chloride	506.9	10	500	0	101	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>492.9</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>98.6</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>504.5</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>498.5</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>99.7</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>530</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>106</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250710		Instrument: VOA4		Method: SW8260						
<b>MSD</b>	Sample ID: <b>HS15030137-02MSD</b>	Units: <b>ug/L</b>			Analysis Date: <b>06-Mar-2015 15:19</b>					
Client ID:	Run ID: <b>VOA4_250710</b>	SeqNo: <b>3206447</b>		PrepDate:			DF: <b>10</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	513.5	10	500	0	103	75 - 130	525.3	2.27	20	
1,2-Dichloroethane	524	10	500	0	105	76 - 120	534	1.89	20	
1,4-Dichlorobenzene	490.6	10	500	0	98.1	80 - 120	487.9	0.561	20	
2-Butanone	1056	20	1000	0	106	60 - 140	1050	0.596	20	
Benzene	508.5	10	500	7.968	100	80 - 120	534.8	5.05	20	
Carbon tetrachloride	461.8	10	500	0	92.4	75 - 125	486.8	5.27	20	
Chlorobenzene	485.3	10	500	0	97.1	80 - 120	510.1	4.98	20	
Chloroform	509.8	10	500	0	102	70 - 130	500.7	1.8	20	
Tetrachloroethene	481.8	10	500	0	96.4	75 - 130	511.7	6	20	
Trichloroethene	499.7	10	500	0	99.9	71 - 125	525.8	5.08	20	
Vinyl chloride	524.7	10	500	0	105	70 - 135	506.9	3.44	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>514.5</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>103</i>	<i>71 - 125</i>	<i>492.9</i>	<i>4.28</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>496.6</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>99.3</i>	<i>70 - 125</i>	<i>504.5</i>	<i>1.57</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>533.8</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>107</i>	<i>74 - 125</i>	<i>498.5</i>	<i>6.84</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>523.5</i>	<i>10</i>	<i>500</i>	<i>0</i>	<i>105</i>	<i>75 - 125</i>	<i>530</i>	<i>1.24</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030179-11 HS15030179-12

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250808      **Instrument:** VOA4      **Method:** SW8260

MBLK	Sample ID: VBLKW-150309	Units: ug/L		Analysis Date: 09-Mar-2015 20:53						
Client ID:	Run ID: VOA4_250808	SeqNo: 3208786	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	50.65	1.0	50	0	101	71 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	47.16	1.0	50	0	94.3	70 - 125				
<i>Surr: Dibromofluoromethane</i>	50.7	1.0	50	0	101	74 - 125				
<i>Surr: Toluene-d8</i>	52.38	1.0	50	0	105	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250808		Instrument: VOA4		Method: SW8260						
<b>LCS</b>	Sample ID: <b>VLCSW-150309</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 20:03</b>					
Client ID:	Run ID: <b>VOA4_250808</b>	SeqNo: <b>3208785</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	51.51	1.0	50	0	103	75 - 130				
1,2-Dichloroethane	55.12	1.0	50	0	110	76 - 120				
1,4-Dichlorobenzene	50.44	1.0	50	0	101	80 - 120				
2-Butanone	112.2	2.0	100	0	112	60 - 140				
Benzene	53.23	1.0	50	0	106	80 - 120				
Carbon tetrachloride	46.23	1.0	50	0	92.5	75 - 125				
Chlorobenzene	52.56	1.0	50	0	105	80 - 120				
Chloroform	53.76	1.0	50	0	108	70 - 130				
Tetrachloroethene	49.93	1.0	50	0	99.9	75 - 130				
Trichloroethene	51.83	1.0	50	0	104	71 - 125				
Vinyl chloride	55.63	1.0	50	0	111	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.68</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.5</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>51.85</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>51.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250808		Instrument: VOA4		Method: SW8260						
<b>MS</b>	Sample ID: <b>HS15030194-13MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 23:24</b>					
Client ID:	Run ID: <b>VOA4_250808</b>	SeqNo: <b>3208789</b>		PrepDate:			DF: <b>5</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	249.3	5.0	250	0	99.7	75 - 130				
1,2-Dichloroethane	256.5	5.0	250	0	103	76 - 120				
1,4-Dichlorobenzene	222.2	5.0	250	0	88.9	80 - 120				
2-Butanone	557.6	10	500	0	112	60 - 140				
Benzene	255.3	5.0	250	0	102	80 - 120				
Carbon tetrachloride	226.2	5.0	250	0	90.5	79 - 120				
Chlorobenzene	234	5.0	250	0	93.6	80 - 120				
Chloroform	248.6	5.0	250	0	99.4	70 - 130				
Tetrachloroethene	231.3	5.0	250	0	92.5	75 - 130				
Trichloroethene	242.5	5.0	250	0	97.0	71 - 125				
Vinyl chloride	245.8	5.0	250	0	98.3	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>258.6</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>103</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>253.7</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>261.4</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>105</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>267.8</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>107</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250808		Instrument: VOA4		Method: SW8260						
MSD	Sample ID: HS15030194-13MSD	Units: ug/L			Analysis Date: 09-Mar-2015 23:49					
Client ID:	Run ID: VOA4_250808	SeqNo: 3208790	PrepDate:	DF: 5						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	279.3	5.0	250	0	112	75 - 130	249.3	11.3	20	
1,2-Dichloroethane	293.7	5.0	250	0	117	76 - 120	256.5	13.5	20	
1,4-Dichlorobenzene	256.7	5.0	250	0	103	80 - 120	222.2	14.4	20	
2-Butanone	665.8	10	500	0	133	60 - 140	557.6	17.7	20	
Benzene	286.7	5.0	250	0	115	80 - 120	255.3	11.6	20	
Carbon tetrachloride	253.7	5.0	250	0	101	75 - 125	226.2	11.5	20	
Chlorobenzene	271.4	5.0	250	0	109	80 - 120	234	14.8	20	
Chloroform	284.8	5.0	250	0	114	70 - 130	248.6	13.6	20	
Tetrachloroethene	268	5.0	250	0	107	75 - 130	231.3	14.7	20	
Trichloroethene	274.1	5.0	250	0	110	71 - 125	242.5	12.2	20	
Vinyl chloride	282.4	5.0	250	0	113	70 - 135	245.8	13.9	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>287.1</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>115</i>	<i>71 - 125</i>	<i>258.6</i>	<i>10.5</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>293.6</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>117</i>	<i>70 - 125</i>	<i>253.7</i>	<i>14.6</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>286</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>114</i>	<i>74 - 125</i>	<i>261.4</i>	<i>8.97</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>295.8</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>118</i>	<i>75 - 125</i>	<i>267.8</i>	<i>9.94</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030179-05 HS15030179-10

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250903      **Instrument:** VOA6      **Method:** SW1311/8260B

MBLK	Sample ID: VBLKW-150310	Units: ug/L			Analysis Date: 10-Mar-2015 13:57					
Client ID:	Run ID: VOA6_250903	SeqNo: 3210236	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	46.78	5.0	50	0	93.6	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	46.59	5.0	50	0	93.2	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	48.8	5.0	50	0	97.6	71.2 - 125				
<i>Surr: Toluene-d8</i>	48.84	5.0	50	0	97.7	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250903		Instrument: VOA6		Method: SW1311/8260B						
<b>MBLK</b>	Sample ID: <b>MBLKV1-150309</b>	Units: <b>ug/L</b>			Analysis Date: <b>10-Mar-2015 18:46</b>					
Client ID:	Run ID: <b>VOA6_250903</b>	SeqNo: <b>3210242</b>		PrepDate:			DF: <b>20</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>937.1</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>93.7</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>980</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>98.0</i>	<i>72.4 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>1001</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>71.2 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>950.1</i>	<i>100</i>	<i>1000</i>	<i>0</i>	<i>95.0</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250903		Instrument: VOA6		Method: SW1311/8260B						
<b>LCS</b>	Sample ID: <b>VLCSW-150310</b>	Units: <b>ug/L</b>			Analysis Date: <b>10-Mar-2015 12:45</b>					
Client ID:	Run ID: <b>VOA6_250903</b>	SeqNo: <b>3210235</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	48.5	5.0	50	0	97.0	73 - 124				
1,2-Dichloroethane	44.13	5.0	50	0	88.3	76 - 120				
1,4-Dichlorobenzene	48.43	5.0	50	0	96.9	70 - 130				
2-Butanone	80.98	10	100	0	81.0	70 - 130				
Benzene	46.92	5.0	50	0	93.8	70 - 128				
Carbon tetrachloride	47.9	5.0	50	0	95.8	70 - 130				
Chlorobenzene	47.45	5.0	50	0	94.9	72 - 127				
Chloroform	46.29	5.0	50	0	92.6	70 - 130				
Tetrachloroethene	47.46	5.0	50	0	94.9	70 - 130				
Trichloroethene	49.13	5.0	50	0	98.3	72 - 129				
Vinyl chloride	44.35	2.0	50	0	88.7	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.63</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.3</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.79</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.46</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>96.9</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49.57</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>99.1</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250903		Instrument: VOA6		Method: SW1311/8260B						
<b>MS</b>	Sample ID: <b>HS15030295-01MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>10-Mar-2015 15:09</b>					
Client ID:	Run ID: <b>VOA6_250903</b>	SeqNo: <b>3210238</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	47.12	5.0	50	0	94.2	73 - 124				
1,2-Dichloroethane	43.22	5.0	50	0	86.4	76 - 120				
1,4-Dichlorobenzene	45.09	5.0	50	0	90.2	70 - 130				
2-Butanone	75.39	10	100	0	75.4	70 - 130				
Benzene	46.43	5.0	50	0	92.9	70 - 128				
Carbon tetrachloride	47.71	5.0	50	0	95.4	70 - 130				
Chlorobenzene	47.3	5.0	50	0	94.6	72 - 127				
Chloroform	45.56	5.0	50	0	91.1	70 - 130				
Tetrachloroethene	48.42	5.0	50	0	96.8	70 - 130				
Trichloroethene	48.86	5.0	50	0	97.7	72 - 129				
Vinyl chloride	46.84	2.0	50	0	93.7	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.54</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.1</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.58</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48.63</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.3</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49.89</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>99.8</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250903      **Instrument:** VOA6      **Method:** SW1311/8260B

MSD		Sample ID: HS15030295-01MSD			Units: ug/L		Analysis Date: 10-Mar-2015 15:33			
Client ID:		Run ID: VOA6_250903			SeqNo: 3210239		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.61	5.0	50	0	87.2	73 - 124	47.12	7.74	20	
1,2-Dichloroethane	42.81	5.0	50	0	85.6	76 - 120	43.22	0.952	20	
1,4-Dichlorobenzene	45.85	5.0	50	0	91.7	70 - 130	45.09	1.68	20	
2-Butanone	79.84	10	100	0	79.8	70 - 130	75.39	5.74	20	
Benzene	45.05	5.0	50	0	90.1	70 - 128	46.43	3.02	20	
Carbon tetrachloride	44.49	5.0	50	0	89.0	70 - 130	47.71	6.99	20	
Chlorobenzene	47.35	5.0	50	0	94.7	72 - 127	47.3	0.0984	20	
Chloroform	45.26	5.0	50	0	90.5	70 - 130	45.56	0.651	20	
Tetrachloroethene	46.77	5.0	50	0	93.5	70 - 130	48.42	3.46	20	
Trichloroethene	47.63	5.0	50	0	95.3	72 - 129	48.86	2.55	20	
Vinyl chloride	42.32	2.0	50	0	84.6	70 - 130	46.84	10.1	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.3</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>92.6</i>	<i>70 - 125</i>	<i>46.54</i>	<i>0.526</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.32</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>72 - 125</i>	<i>50.58</i>	<i>1.44</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>48.91</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.8</i>	<i>71 - 125</i>	<i>48.63</i>	<i>0.575</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>50.12</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>75 - 125</i>	<i>49.89</i>	<i>0.448</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030179-06      HS15030179-07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
MBLK	Sample ID: VBLKW-150311	Units: ug/L			Analysis Date: 11-Mar-2015 11:20					
Client ID:	Run ID: VOA6_250959	SeqNo: 3211328		PrepDate:		DF: 1				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	46.69	5.0	50	0	93.4	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	46.69	5.0	50	0	93.4	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	48.57	5.0	50	0	97.1	71.2 - 125				
<i>Surr: Toluene-d8</i>	49.34	5.0	50	0	98.7	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
MBLK	Sample ID: MBLKV1-150310	Units: ug/L			Analysis Date: 11-Mar-2015 15:21					
Client ID:	Run ID: VOA6_250959	SeqNo: 3211336		PrepDate:			DF: 20			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
<i>Surr: 1,2-Dichloroethane-d4</i>	916.7	100	1000	0	91.7	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	950	100	1000	0	95.0	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	969.5	100	1000	0	97.0	71.2 - 125				
<i>Surr: Toluene-d8</i>	993.8	100	1000	0	99.4	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
<b>LCS</b>	Sample ID: <b>VLCSW-150311</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 10:32</b>					
Client ID:	Run ID: <b>VOA6_250959</b>	SeqNo: <b>3211327</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.38	5.0	50	0	90.8	73 - 124				
1,2-Dichloroethane	46.37	5.0	50	0	92.7	76 - 120				
1,4-Dichlorobenzene	49.6	5.0	50	0	99.2	70 - 130				
2-Butanone	89.77	10	100	0	89.8	70 - 130				
Benzene	48.91	5.0	50	0	97.8	70 - 128				
Carbon tetrachloride	50.09	5.0	50	0	100	70 - 130				
Chlorobenzene	50.59	5.0	50	0	101	72 - 127				
Chloroform	47.54	5.0	50	0	95.1	70 - 130				
Tetrachloroethene	50.41	5.0	50	0	101	70 - 130				
Trichloroethene	52.34	5.0	50	0	105	72 - 129				
Vinyl chloride	44.18	2.0	50	0	88.4	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>45.42</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>90.8</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.76</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.09</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.2</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.0</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
MS	Sample ID: HS15030332-02MS	Units: ug/L			Analysis Date: 11-Mar-2015 14:09					
Client ID:	Run ID: VOA6_250959	SeqNo: 3211334		PrepDate:			DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	43.43	5.0	50	0	86.9	73 - 124				
1,2-Dichloroethane	45.16	5.0	50	0	90.3	76 - 120				
1,4-Dichlorobenzene	44.8	5.0	50	0	89.6	70 - 130				
2-Butanone	90.12	10	100	0	90.1	70 - 130				
Benzene	46.37	5.0	50	0	92.7	70 - 128				
Carbon tetrachloride	45.77	5.0	50	0	91.5	70 - 130				
Chlorobenzene	47.57	5.0	50	0	95.1	72 - 127				
Chloroform	48.11	5.0	50	0	96.2	70 - 130				
Tetrachloroethene	45.36	5.0	50	0	90.7	70 - 130				
Trichloroethene	48.33	5.0	50	0	96.7	72 - 129				
Vinyl chloride	46.32	2.0	50	0	92.6	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.64</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.3</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.37</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.3</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>48.97</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.9</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250959      **Instrument:** VOA6      **Method:** SW1311/8260B

MSD		Sample ID: HS15030332-02MSD			Units: ug/L		Analysis Date: 11-Mar-2015 14:33			
Client ID:		Run ID: VOA6_250959			SeqNo: 3211335		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.66	5.0	50	0	87.3	73 - 124	43.43	0.535	20	
1,2-Dichloroethane	48.99	5.0	50	0	98.0	76 - 120	45.16	8.12	20	
1,4-Dichlorobenzene	47.87	5.0	50	0	95.7	70 - 130	44.8	6.62	20	
2-Butanone	98.57	10	100	0	98.6	70 - 130	90.12	8.95	20	
Benzene	47.72	5.0	50	0	95.4	70 - 128	46.37	2.87	20	
Carbon tetrachloride	47.37	5.0	50	0	94.7	70 - 130	45.77	3.43	20	
Chlorobenzene	49.52	5.0	50	0	99.0	72 - 127	47.57	4.02	20	
Chloroform	47.94	5.0	50	0	95.9	70 - 130	48.11	0.366	20	
Tetrachloroethene	46.89	5.0	50	0	93.8	70 - 130	45.36	3.32	20	
Trichloroethene	50.3	5.0	50	0	101	72 - 129	48.33	3.99	20	
Vinyl chloride	44.58	2.0	50	0	89.2	70 - 130	46.32	3.83	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.39</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>92.8</i>	<i>70 - 125</i>	<i>46.64</i>	<i>0.533</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.62</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>	<i>50.37</i>	<i>0.495</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>49.27</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>71 - 125</i>	<i>49.3</i>	<i>0.0669</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>49.27</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>75 - 125</i>	<i>48.97</i>	<i>0.606</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030179-01    HS15030179-02    HS15030179-03    HS15030179-04  
 HS15030179-08    HS15030179-09

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250703      **Instrument:** WetChem\_HS      **Method:** SM4500H+ B

<b>LCS</b>	Sample ID: <b>LCS-250703</b>	Units: <b>pH Units</b>		Analysis Date: <b>06-Mar-2015 15:33</b>						
Client ID:	Run ID: <b>WetChem_HS_250703</b>	SeqNo: <b>3206313</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
pH	5.98	0.100	6	0	99.7	97 - 103				

<b>DUP</b>	Sample ID: <b>HS15030191-01DUP</b>	Units: <b>pH Units</b>		Analysis Date: <b>06-Mar-2015 15:33</b>						
Client ID:	Run ID: <b>WetChem_HS_250703</b>	SeqNo: <b>3206314</b>		PrepDate:			DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
pH	7.12	0.100					7.19	0.978	10	
Temp Deg C @pH	21	0					21	0	10	

**The following samples were analyzed in this batch:**

HS15030179-02	HS15030179-03	HS15030179-04	HS15030179-05
HS15030179-08	HS15030179-09		

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250705      **Instrument:** WetChem\_HS      **Method:** SW9045B

<b>LCS</b>	Sample ID: <b>LCS-250705</b>	Units: <b>pH Units</b>			Analysis Date: <b>06-Mar-2015 15:43</b>				
Client ID:		Run ID: <b>WetChem_HS_250705</b>	SeqNo: <b>3206325</b>	PrepDate:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	5.97	0.100	6	0	99.5	97 - 103			

<b>DUP</b>	Sample ID: <b>HS15030179-06DUP</b>	Units: <b>pH Units</b>			Analysis Date: <b>06-Mar-2015 15:43</b>				
Client ID: <b>USOR-EQ-13-ICP Tank A</b>		Run ID: <b>WetChem_HS_250705</b>	SeqNo: <b>3206326</b>	PrepDate:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	7.77	0.100					7.76	0.129	10

The following samples were analyzed in this batch: HS15030179-06      HS15030179-07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250852      **Instrument:** WetChem\_HS      **Method:** SW9045B

<b>LCS</b>	Sample ID: <b>LCS-250852</b>	Units: <b>pH Units</b>				Analysis Date: <b>10-Mar-2015 14:28</b>				
Client ID:		Run ID: <b>WetChem_HS_250852</b>	SeqNo: <b>3209378</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.97	0.100	6	0	99.5	97 - 103				

<b>DUP</b>	Sample ID: <b>HS15030279-06DUP</b>	Units: <b>pH Units</b>				Analysis Date: <b>10-Mar-2015 14:28</b>				
Client ID:		Run ID: <b>WetChem_HS_250852</b>	SeqNo: <b>3209379</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	8.08	0.100					8.01	0.87	10	

The following samples were analyzed in this batch: HS15030179-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250862      **Instrument:** WetChem\_HS      **Method:** SW1030

<b>DUP</b>	Sample ID: <b>HS15030283-01DUP</b>	Units: <b>Burn Rate, mm/sec</b>	Analysis Date: <b>10-Mar-2015 16:15</b>							
Client ID:	Run ID: <b>WetChem_HS_250862</b>	SeqNo: <b>3209595</b>	PrepDate:      DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability, Solid	Negative	0					0	0	25	

The following samples were analyzed in this batch: HS15030179-06      HS15030179-07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QC BATCH REPORT**

**Batch ID:** R250865      **Instrument:** WetChem\_HS      **Method:** SW1010

<b>LCS</b>	Sample ID: <b>LCS-250865</b>	Units: °F		Analysis Date: <b>10-Mar-2015 16:00</b>						
Client ID:	Run ID: <b>WetChem_HS_250865</b>	SeqNo: <b>3209624</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Ignitability	82	50.0	81	0	101	95 - 105				

<b>DUP</b>	Sample ID: <b>HS15030179-01DUP</b>	Units: °F		Analysis Date: <b>10-Mar-2015 16:00</b>						
Client ID: <b>USOR-EQ-1-Heated&amp;Agitated Frac Tank</b>	Run ID: <b>WetChem_HS_250865</b>	SeqNo: <b>3209625</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
Ignitability	> 212	50.0					0	0	25	

**The following samples were analyzed in this batch:**

HS15030179-01	HS15030179-02	HS15030179-03	HS15030179-04
HS15030179-05	HS15030179-08	HS15030179-09	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**WorkOrder:** HS15030179

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b>Unit Reported</b>	<b>Description</b>
°F	Fahrenheit degrees
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
no unit	
pH Units	

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
Arkansas	AR - 2014	27-Mar-2015
California	2919	31-Jul-2016
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 2014-2015	31-Jul-2015
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2015	31-Dec-2015
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	T104704231-14-14	30-Apr-2015

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030179

**SAMPLE TRACKING**

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Login	3/5/2015 6:18:42 PM	RPG	13E
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Login	3/5/2015 6:18:42 PM	RPG	13E
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Login	3/5/2015 6:18:42 PM	RPG	13E
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Login	3/5/2015 6:18:42 PM	RPG	Sub
HS15030179-01	USOR-EQ-1-Heated&Agitated Frac Tank	Login	3/5/2015 6:18:42 PM	RPG	VW-3
HS15030179-02	USOR-EQ-14-ICP Tank B	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-02	USOR-EQ-14-ICP Tank B	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-02	USOR-EQ-14-ICP Tank B	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-02	USOR-EQ-14-ICP Tank B	Login	3/5/2015 6:31:59 PM	RPG	Sub
HS15030179-02	USOR-EQ-14-ICP Tank B	Login	3/5/2015 6:31:59 PM	RPG	VW-3
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Login	3/5/2015 6:31:59 PM	RPG	Sub
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	Login	3/5/2015 6:31:59 PM	RPG	VW-3
HS15030179-04	Field Dup #1	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-04	Field Dup #1	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-04	Field Dup #1	Login	3/5/2015 6:31:59 PM	RPG	13E
HS15030179-04	Field Dup #1	Login	3/5/2015 6:31:59 PM	RPG	Sub
HS15030179-04	Field Dup #1	Login	3/5/2015 6:31:59 PM	RPG	VW-3
HS15030179-05	Equipment Blank # 2	Login	3/5/2015 6:37:58 PM	RPG	13E
HS15030179-05	Equipment Blank # 2	Login	3/5/2015 6:37:58 PM	RPG	13E
HS15030179-05	Equipment Blank # 2	Login	3/5/2015 6:37:58 PM	RPG	13E
HS15030179-05	Equipment Blank # 2	Login	3/5/2015 6:37:58 PM	RPG	Sub
HS15030179-05	Equipment Blank # 2	Login	3/5/2015 6:37:58 PM	RPG	VW-3
HS15030179-06	USOR-EQ-13-ICP Tank A	Login	3/5/2015 6:45:50 PM	RPG	13E
HS15030179-06	USOR-EQ-13-ICP Tank A	Login	3/5/2015 6:45:50 PM	RPG	13E
HS15030179-06	USOR-EQ-13-ICP Tank A	Login	3/5/2015 6:45:50 PM	RPG	Sub
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	Login	3/5/2015 6:45:50 PM	RPG	13E
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	Login	3/5/2015 6:45:50 PM	RPG	13E
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	Login	3/5/2015 6:45:50 PM	RPG	Sub
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Login	3/5/2015 6:55:44 PM	RPG	Sub
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	Login	3/5/2015 6:55:44 PM	RPG	VW-3
HS15030179-09	USOR-EQ-29 Large Rectangular Box	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-09	USOR-EQ-29 Large Rectangular Box	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-09	USOR-EQ-29 Large Rectangular Box	Login	3/5/2015 6:55:44 PM	RPG	13E
HS15030179-09	USOR-EQ-29 Large Rectangular Box	Login	3/5/2015 6:55:44 PM	RPG	Sub

**Client:** Effective Environmental Inc.  
**Project:** USOR Equ Assessment and Sampling 8181  
**Work Order:** HS15030179

**SAMPLE TRACKING**

HS15030179-09	USOR-EQ-29 Large Rectangular Box	Login	3/5/2015 6:55:44 PM	RPG	VW-3
HS15030179-10	Trip Blank	Login	3/5/2015 7:02:22 PM	RPG	VW-3
HS15030179-11	Trip Blank 2	Login	3/5/2015 7:04:15 PM	RPG	VW-3
HS15030179-12	Trip Blank 3	Login	3/5/2015 7:04:16 PM	RPG	VW-3
HS15030179-13	USOR EQ 1 Heated&Agitated Frac Tank	Login	3/5/2015 7:17:25 PM	RPG	13E
HS15030179-13	USOR EQ 1 Heated&Agitated Frac Tank	Login	3/5/2015 7:17:25 PM	RPG	13E
HS15030179-13	USOR EQ 1 Heated&Agitated Frac Tank	Login	3/5/2015 7:17:25 PM	RPG	13E
HS15030179-14	USOR EQ 2 Dissolved Air Flotation Tank	Login	3/5/2015 7:17:25 PM	RPG	13E
HS15030179-14	USOR EQ 2 Dissolved Air Flotation Tank	Login	3/5/2015 7:17:25 PM	RPG	13E
HS15030179-14	USOR EQ 2 Dissolved Air Flotation Tank	Login	3/5/2015 7:17:25 PM	RPG	13E

**Sample Receipt Checklist**

Client Name: Effective Env-HOU  
 Work Order: HS15030179

Date/Time Received: **05-Mar-2015 15:05**  
 Received by: **JBA**

Checklist completed by: Raegen Giga 5-Mar-2015 Reviewed by: Dane J. Wacasey 9-Mar-2015  
 eSignature Date eSignature Date

Matrices: **Liquid/Solid** Carrier name: **ALS.HS**

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No

Temperature(s)/Thermometer(s): 1.0c/1.0c - 0.8c/0.8c - 0.7c/0.7c c/u IR 3

Cooler(s)/Kit(s): 5620/5625/23864

Date/Time sample(s) sent to storage: 03/05/2015 19:10

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes: JSOR-EQ-1 and 2 samples (Solids) logged in no test codes per client request to cancel. Samples will be submitted and reported under a separate work order. Logged in at the end of the work order.

Client Contacted: \_\_\_\_\_ Date Contacted: \_\_\_\_\_ Person Contacted: \_\_\_\_\_

Contacted By: 0 Regarding: \_\_\_\_\_

Comments:

Corrective Action:



ALS Laboratory Group  
 10450 Stancliff Rd. #210  
 Houston, Texas 77099  
 (Tel) 281.530.5656  
 (Fax) 281.530.5887

# Chain of Custody Form

Page 1 of 1

HS15030179

Effective Environmental Inc.  
 USOR Equ Assessment and Sampling 8181



ALS Project Manager: \_\_\_\_\_

Customer Information		Project Information		Para
Purchase Order	FS-10054	Project Name	USOR-Equ. Assessment & Sampling	A TCLP - VOCs
Work Order		Project Number	8181	B TCLP - SVOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C TCLP RCRA 8 Metals
Send Report To	Hiren Shah	Invoice Attn.	Hiren Shah	D RCI
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E VOCs for trip blank
				F
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	G
Phone	281-842-0804	Phone	972-329-1200	H
Fax	281-474-2580	Fax	972-329-1206	I
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	J

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	USOR-EQ-1 - Heated & Agitated Frac Tank	03/04/15	7:30 a.m.	Liquid		8	X	X	X	X							
2	USOR-EQ-1 - Heated & Agitated Frac Tank	03/04/15	7:40 a.m.	Solids		4	X	X	X	X							
3	USOR-EQ-2 - Dissolved Air Flotation Unit	03/04/15	9:00 a.m.	Solids		4	X	X	X	X							
4	USOR-EQ-14 - ICP Tank B	03/04/15	10:00 a.m.	Liquid		8	X	X	X	X							
5	USOR-EQ-15 - Rectangular Mix Tank	03/04/15	10:30 a.m.	Liquid		8	X	X	X	X							
6	Field Dup #1	03/04/15	10:45 a.m.	Liquid		8	X	X	X	X							
7	Equipment Blank #2	03/03/15	12:00 noon	Liquid		8	X	X	X	X							
8	USOR-EQ-13 - ICP Tank A	03/04/15	1:00 p.m.	Solids		4	X	X	X	X							
9	USOR-EQ-15 - Rectangular Mix Tank	03/04/15	1:30 p.m.	Solids		4	X	X	X	X							
10	USOR-EQ-12 - Rectangular Mix Tank	03/04/15	2:00 p.m.	Liquid		8	X	X	X	X							
11	USOR-EQ-29 Large Rectangular Box	03/04/15	2:30 p.m.	Liquid		8	X	X	X	X							
12	Trip Blank-3 samples (1 sample/cooler)										X						

Sampler(s): Please Print & Sign: Joe Carillo Shipment Method: \_\_\_\_\_ Required Turnaround Time:  BTD 10 Wk Days  5 Wk Days  Other \_\_\_\_\_  Wk Days  24 Hour Results Due Date: \_\_\_\_\_

Relinquished by: <u>[Signature]</u>	Date: <u>3/4/15</u>	Time: <u>6:10 p.m.</u>	Received by: <u>Hiren Shah</u>	Notes: _____
Relinquished by: <u>Hiren Shah</u>	Date: <u>3/5/15</u>	Time: <u>1:30</u>	Received by (Laboratory): <u>[Signature]</u>	
Relinquished by: _____	Date: _____	Time: <u>15:05</u>	Received by: <u>J. Anon. 3/5/15</u>	

Cooler Temp. \_\_\_\_\_ QC Package: (Check Box Below)

<input type="checkbox"/> Level II: Standard QC	TRRP-Checklist
<input type="checkbox"/> Level III: Std QC + Raw Data	TRRP Level IV
<input type="checkbox"/> Level IV: SW846 CLP-Like	
Other: _____	

Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

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 HS15030179  
 # 2281-11



10-Mar-2015

Dane J. Wacasey  
ALS Environmental  
10450 Stancliff Rd  
Suite 210  
Houston, TX 77099

Re: **HS15030179**

Work Order: **1503380**

Dear Dane,

ALS Environmental received 9 samples on 07-Mar-2015 01:30 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 17.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Electronically approved by: Chad Whelton

Chad Whelton  
Project Manager

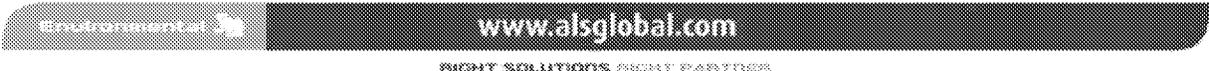


Certificate No: MN 532786

### Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-6283 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company



RIGHT SOLUTIONS. RIGHT PARTNER.

Client: ALS Environmental  
 Project: HS15030179  
 Work Order: 1503380

**Work Order Sample Summary**

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1503380-01	HS15030179-01	Liquid	USOR-EQ-1-Heated&Agitated F/Tnk	3/4/2015 07:30	3/7/2015 13:30	<input type="checkbox"/>
1503380-02	HS15030179-02	Liquid	USOR-EQ-14-ICP Tank B	3/4/2015 10:00	3/7/2015 13:30	<input type="checkbox"/>
1503380-03	HS15030179-03	Liquid	USOR-EQ-15 Rectangular Mix Tank	3/4/2015 10:30	3/7/2015 13:30	<input type="checkbox"/>
1503380-04	HS15030179-04	Liquid	Field Dup #1	3/4/2015 10:45	3/7/2015 13:30	<input type="checkbox"/>
1503380-05	HS15030179-05	Liquid	Equipment Blank # 2	3/4/2015 12:00	3/7/2015 13:30	<input type="checkbox"/>
1503380-06	HS15030179-06	Solid	USOR-EQ-13-ICP Tank A	3/4/2015 13:00	3/7/2015 13:30	<input type="checkbox"/>
1503380-07	HS15030179-07	Solid	USOR-EQ-15-Rectangular Mix Tank	3/4/2015 13:30	3/7/2015 13:30	<input type="checkbox"/>
1503380-08	HS15030179-08	Liquid	USOR-EQ-12 Rectangular Mix Tank	3/4/2015 14:00	3/7/2015 13:30	<input type="checkbox"/>
1503380-09	HS15030179-09	Liquid	USOR-EQ-29 Large Rectangular Box	3/4/2015 14:30	3/7/2015 13:30	<input type="checkbox"/>

**Client:** ALS Environmental  
**Project:** HS15030179  
**WorkOrder:** 1503380

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and PQL, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
mg/Kg	Milligrams per Kilogram

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-01  
**Collection Date:** 3/4/2015 07:30 AM

**Work Order:** 1503380  
**Lab ID:** 1503380-01  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-02  
**Collection Date:** 3/4/2015 10:00 AM

**Work Order:** 1503380  
**Lab ID:** 1503380-02  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-03  
**Collection Date:** 3/4/2015 10:30 AM

**Work Order:** 1503380  
**Lab ID:** 1503380-03  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-04  
**Collection Date:** 3/4/2015 10:45 AM

**Work Order:** 1503380  
**Lab ID:** 1503380-04  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: <b>TVD</b> 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: <b>TVD</b> 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-05  
**Collection Date:** 3/4/2015 12:00 PM

**Work Order:** 1503380  
**Lab ID:** 1503380-05  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-06  
**Collection Date:** 3/4/2015 01:00 PM

**Work Order:** 1503380  
**Lab ID:** 1503380-06  
**Matrix:** SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-07  
**Collection Date:** 3/4/2015 01:30 PM

**Work Order:** 1503380  
**Lab ID:** 1503380-07  
**Matrix:** SOLID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	ND		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**ALS Group USA, Corp**

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-08  
**Collection Date:** 3/4/2015 02:00 PM

**Work Order:** 1503380  
**Lab ID:** 1503380-08  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	130		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

# ALS Group USA, Corp

Date: 10-Mar-15

**Client:** ALS Environmental  
**Project:** HS15030179  
**Sample ID:** HS15030179-09  
**Collection Date:** 3/4/2015 02:30 PM

**Work Order:** 1503380  
**Lab ID:** 1503380-09  
**Matrix:** LIQUID

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>CYANIDE, REACTIVE</b> Cyanide, Reactive	ND		<b>SW7.3.3.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:45 PM
<b>SULFIDE, REACTIVE</b> Sulfide, Reactive	110		<b>SW7.3.4.2</b> 100	mg/Kg	1	Analyst: TVD 3/9/2015 09:00 PM

**Note:** See Qualifiers page for a list of qualifiers and their definitions.

**Client:** ALS Environmental  
**Work Order:** 1503380  
**Project:** HS15030179

**QC BATCH REPORT**

Batch ID: **R158833** Instrument ID **WETCHEM** Method: **SW7.3.4.2**

<b>MBLK</b>	Sample ID: <b>MB-R158833-R158833</b>				Units: <b>mg/Kg</b>	Analysis Date: <b>3/9/2015 09:00 PM</b>				
Client ID:	Run ID: <b>WETCHEM_1503090</b>			SeqNo: <b>3171067</b>	Prep Date:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfide, Reactive                      ND              100

<b>LCS</b>	Sample ID: <b>LCS-R158833-R158833</b>				Units: <b>mg/Kg</b>	Analysis Date: <b>3/9/2015 09:00 PM</b>				
Client ID:	Run ID: <b>WETCHEM_1503090</b>			SeqNo: <b>3171068</b>	Prep Date:	DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Sulfide, Reactive                      1488              100              2149              0              69.2              60-120              0

**The following samples were analyzed in this batch:**

1503380-01A	1503380-02A	1503380-03A
1503380-04A	1503380-05A	1503380-06A
1503380-07A	1503380-08A	1503380-09A

**Note:** See Qualifiers Page for a list of Qualifiers and their explanation.

Client: ALS Environmental  
 Work Order: 1503380  
 Project: HS15030179

# QC BATCH REPORT

Batch ID: **R158837** Instrument ID **WETCHEM** Method: **SW7.3.3.2**

MBLK		Sample ID: <b>MB-R158837-R158837</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 09:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_150309P</b>		SeqNo: <b>3171123</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	ND	100								

LCS		Sample ID: <b>LCS-R158837-R158837</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 09:45 PM</b>		
Client ID:		Run ID: <b>WETCHEM_150309P</b>		SeqNo: <b>3171124</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	102.8	100	125	0	82.2	75-125	0			

MS		Sample ID: <b>1503380-03A MS</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 09:45 PM</b>		
Client ID: <b>HS15030179-03</b>		Run ID: <b>WETCHEM_150309P</b>		SeqNo: <b>3171142</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	232.6	100	250	14.56	87.2	50-150	0			

MSD		Sample ID: <b>1503380-03A MSD</b>				Units: <b>mg/Kg</b>		Analysis Date: <b>3/9/2015 09:45 PM</b>		
Client ID: <b>HS15030179-03</b>		Run ID: <b>WETCHEM_150309P</b>		SeqNo: <b>3171143</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Reactive	247.1	100	250	14.56	93	50-150	232.6	6.06	35	

The following samples were analyzed in this batch:

1503380-01A	1503380-02A	1503380-03A
1503380-04A	1503380-05A	1503380-06A
1503380-07A	1503380-08A	1503380-09A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

1503380



# CHAIN OF CUSTODY RECORD

Date 5 Mar 2015

**(ALS) Environmental**

Page 1 of 1

COC ID 2386

Due date 12 MAR 15

Subcontractor	
ALS Laboratory Group	Phone
3352 128th Ave.	6163996070
Holland, MI 494249263	Fax
	6163996185

Customer Information		Project Information	
PO		Project Name	HS15030179

Company Name	ALS Houston	Company Name	ALS Houston
		Inv Attn	Accounts Payable
Address	10450 Standliff Rd, Ste 210	Address	10450 Standliff Rd, Ste 210
	Houston, TX 77099		Houston, TX 77099
Phone	281-530-5856	Phone	281-530-5856
Email1	Dane.Wacasey@alsglobal.com	Email2	jumoke.lawal@alsglobal.com

Lab ID	Client Samp ID	Collection Date	Matrix	Analysis Requested
HS15030179-01	USOR-EQ-1-Heated&Agitated F/Tnk	04-Mar-15 07:30 am	Liquid	RCN_W, RS_W
HS15030179-02	USOR-EQ-14-ICP Tank B	04-Mar-15 10:00 am	Liquid	RCN_W, RS_W
HS15030179-03	USOR-EQ-15 Rectangular Mix Tank	04-Mar-15 10:30 am	Liquid	RCN_W, RS_W
HS15030179-04	Field Dup #1	04-Mar-15 10:45 am	Liquid	RCN_W, RS_W
HS15030179-05	Equipment Blank # 2	03-Mar-15 12:00 pm	Liquid	RCN_W, RS_W
HS15030179-06	USOR-EQ-13-ICP Tank A	04-Mar-15 01:00 pm	Solid	RCN_S, RS_S
HS15030179-07	USOR-EQ-15-Rectangular Mix Tank	04-Mar-15 01:30 pm	Solid	RCN_S, RS_S
HS15030179-08	USOR-EQ-12 Rectangular Mix Tank	04-Mar-15 02:00 pm	Liquid	RCN_W, RS_W
HS15030179-09	USOR-EQ-29 Large Rectangular Box	04-Mar-15 02:30 pm	Liquid	RCN_W, RS_W

Comments Please analyze for the above. Send reports to e-mail 1 & 2 provided on COC.

Relinquished by:	Date/Time:	Received by:	Date/Time:	Cooler IDs:	Report Level
R Giga	03/06/15 18:00				
		D. J. She	3/7/15 1330		

3.0°C



Sample Receipt Checklist

Client Name: **ALS - HOUSTON**

Date/Time Received: **07-Mar-15 13:30**

Work Order: **1503380**

Received by: **DS**

Checklist completed by Diane Shaw 09-Mar-15  
eSignature Date

Reviewed by: Chad Whilton 09-Mar-15  
eSignature Date

Matrices: Liquid, Solid

Carrier name: FedEx

Shipping container/cooler in good condition? Yes  No  Not Present

Custody seals intact on shipping container/cooler? Yes  No  Not Present

Custody seals intact on sample bottles? Yes  No  Not Present

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Container/Temp Blank temperature in compliance? Yes  No

Sample(s) received on ice? Yes  No

Temperature(s)/Thermometer(s): 3.0 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 3/9/2015 9:00:04 AM

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



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March 30, 2015

Hiren Shah  
Effective Environmental Inc.  
9950 Chemical Road  
Pasadena, TX 77507

Work Order: **HS15030223**

Revision: **1**

Laboratory Results for: **USOR - Equ Assesment and Sampling 8181**

Dear Hiren,

ALS Environmental received 4 sample(s) on Mar 06, 2015 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

A handwritten signature in black ink, appearing to read 'Dane Wacasey'.

Generated By: Dane.Wacasey

Dane J. Wacasey

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**Work Order:** HS15030223

**SAMPLE SUMMARY**

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS15030223-01	USOR-EQ-14-ICP Tank B	Solid		05-Mar-2015 10:25	06-Mar-2015 13:26	<input type="checkbox"/>
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	Solid		05-Mar-2015 09:15	06-Mar-2015 13:26	<input type="checkbox"/>
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	Solid		05-Mar-2015 09:45	06-Mar-2015 13:26	<input type="checkbox"/>
HS15030223-04	Trip Blank 030215-13	Water		05-Mar-2015 00:00	06-Mar-2015 13:26	<input type="checkbox"/>

Revision:1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**Work Order:** HS15030223

**CASE NARRATIVE****Work Order Comments**

- At the request of the client, this report was revised March 30, 2015 in order to adjust the sample name for HS15030223-01 to match sample name listed on the container labels.
- Sample received outside method holding time for pH. pH is an immediate test. Sample results are flagged with an "H" qualifier.
- The analyses for Reactive Cyanide and Reactive Sulfide were subcontracted to ALS Environmental in Holland, MI.

**GCMS Semivolatiles by Method SW1311/8270****Batch ID: 91303**Sample ID: **HS15030223-01**Sample ID: **HS15030223-02**Sample ID: **HS15030223-03**

- The GCMS semi-volatile extract of this sample was run at a dilution because the undiluted extract cause an instrument shutdown due to a high level of sample matrix interference.

Sample ID: **LCSD-91303**

- The RPD between the LCS and LCSD was outside of the control limit.

**GCMS Volatiles by Method SW1311/8260B****Batch ID: R250959**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**GCMS Volatiles by Method SW8260****Batch ID: R250808**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Sample ID: **VSTD050**

- 2-Butanone, exceeded %D limits for CCV, Samples are ND for this compound.

**Metals by Method SW7470****Batch ID: 91298**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**Metals by Method SW1311/6020****Batch ID: 91289**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**WetChemistry by Method SW1030****Batch ID: R250986**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

**WetChemistry by Method SW9045B****Batch ID: R250802**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-14-ICP Tank B  
 Collection Date: 05-Mar-2015 10:25

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-01  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW1311 / 09-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 12:08
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 12:08
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 12:08
<b>2-Butanone</b>	<b>0.052</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 12:08
<b>Benzene</b>	<b>0.73</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:08
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 12:08
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 12:08
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 12:08
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 12:08
<b>Trichloroethene</b>	<b>0.018</b>	J	<b>0.010</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:08
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 12:08
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>93.2</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:08</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>98.9</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:08</i>
<i>Surr: Dibromofluoromethane</i>	<i>96.9</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:08</i>
<i>Surr: Toluene-d8</i>	<i>96.5</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:08</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol		U	0.0090	0.050	mg/L	10	12-Mar-2015 13:04
2,4,6-Trichlorophenol		U	0.014	0.050	mg/L	10	12-Mar-2015 13:04
2,4-Dinitrotoluene		U	0.010	0.050	mg/L	10	12-Mar-2015 13:04
<b>Cresols, Total</b>	<b>0.54</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	12-Mar-2015 13:04
Hexachlorobenzene		U	0.011	0.050	mg/L	10	12-Mar-2015 13:04
Hexachlorobutadiene		U	0.011	0.050	mg/L	10	12-Mar-2015 13:04
Hexachloroethane		U	0.010	0.050	mg/L	10	12-Mar-2015 13:04
Nitrobenzene		U	0.0080	0.050	mg/L	10	12-Mar-2015 13:04
Pentachlorophenol		U	0.016	0.050	mg/L	10	12-Mar-2015 13:04
Pyridine		U	0.020	0.050	mg/L	10	12-Mar-2015 13:04
<i>Surr: 2,4,6-Tribromophenol</i>	<i>80.1</i>			<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>84.1</i>			<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>
<i>Surr: 2-Fluorophenol</i>	<i>71.0</i>			<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>100</i>			<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>
<i>Surr: Nitrobenzene-d5</i>	<i>69.0</i>			<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>
<i>Surr: Phenol-d6</i>	<i>99.3</i>			<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>12-Mar-2015 13:04</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-14-ICP Tank B  
 Collection Date: 05-Mar-2015 10:25

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-01  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		Method:SW1311/6020		Leache:SW1311 / 09-Mar-2015	Prep:SW3010A / 11-Mar-2015		Analyst: JDE
Arsenic		U	0.0100	0.0500	mg/L	1	12-Mar-2015 01:19
<b>Barium</b>	<b>0.0893</b>	J	<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	12-Mar-2015 01:19
Cadmium		U	0.00800	0.0500	mg/L	1	12-Mar-2015 01:19
<b>Chromium</b>	<b>0.126</b>		<b>0.0100</b>	<b>0.0500</b>	<b>mg/L</b>	1	12-Mar-2015 01:19
<b>Lead</b>	<b>0.0194</b>	J	<b>0.00700</b>	<b>0.0500</b>	<b>mg/L</b>	1	12-Mar-2015 01:19
Selenium		U	0.0100	0.0500	mg/L	1	12-Mar-2015 01:19
Silver		U	0.00800	0.0500	mg/L	1	12-Mar-2015 01:19
<b>BURN RATE BY METHOD SW1030</b>		Method:SW1030					Analyst: KAH
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	12-Mar-2015 15:50
<b>TCLP MERCURY BY SW7470A</b>		Method:SW7470		Leache:SW1311 / 09-Mar-2015	Prep:SW7470 / 11-Mar-2015		Analyst: OFO
Mercury	<b>0.0000960</b>	J	<b>0.0000420</b>	<b>0.000200</b>	<b>mg/L</b>	1	11-Mar-2015 16:04
<b>PH SOIL BY SW9045D</b>		Method:SW9045B					Analyst: JHD
pH	<b>7.01</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	09-Mar-2015 15:10
<b>REACTIVE CYANIDE</b>		Method:SW7.3.3.2					Analyst: SUB
Reactive Cyanide	See Attached		100		mg/Kg	1	10-Mar-2015 16:30
<b>REACTIVE SULFIDE</b>		Method:SW7.3.4.2					Analyst: SUB
Reactive Sulfide	See Attached		100		mg/Kg	1	10-Mar-2015 15:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-01 Heated & Agitated Frac Tank  
 Collection Date: 05-Mar-2015 09:15

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-02  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW1311 / 09-Mar-2015		Analyst: PC
1,1-Dichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 12:32
1,2-Dichloroethane		U	0.010	0.10	mg/L	20	11-Mar-2015 12:32
1,4-Dichlorobenzene		U	0.012	0.10	mg/L	20	11-Mar-2015 12:32
<b>2-Butanone</b>	<b>0.091</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 12:32
<b>Benzene</b>	<b>0.34</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:32
Carbon tetrachloride		U	0.012	0.10	mg/L	20	11-Mar-2015 12:32
Chlorobenzene		U	0.0080	0.10	mg/L	20	11-Mar-2015 12:32
Chloroform		U	0.012	0.10	mg/L	20	11-Mar-2015 12:32
Tetrachloroethene		U	0.012	0.10	mg/L	20	11-Mar-2015 12:32
Trichloroethene		U	0.010	0.10	mg/L	20	11-Mar-2015 12:32
Vinyl chloride		U	0.0080	0.040	mg/L	20	11-Mar-2015 12:32
<i>Surr: 1,2-Dichloroethane-d4</i>	93.8			70-125	%REC	20	11-Mar-2015 12:32
<i>Surr: 4-Bromofluorobenzene</i>	96.7			72-125	%REC	20	11-Mar-2015 12:32
<i>Surr: Dibromofluoromethane</i>	96.3			71-125	%REC	20	11-Mar-2015 12:32
<i>Surr: Toluene-d8</i>	95.3			75-125	%REC	20	11-Mar-2015 12:32
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol		U	0.0090	0.050	mg/L	10	12-Mar-2015 14:35
2,4,6-Trichlorophenol		U	0.014	0.050	mg/L	10	12-Mar-2015 14:35
2,4-Dinitrotoluene		U	0.010	0.050	mg/L	10	12-Mar-2015 14:35
<b>Cresols, Total</b>	<b>0.54</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	12-Mar-2015 14:35
Hexachlorobenzene		U	0.011	0.050	mg/L	10	12-Mar-2015 14:35
Hexachlorobutadiene		U	0.011	0.050	mg/L	10	12-Mar-2015 14:35
Hexachloroethane		U	0.010	0.050	mg/L	10	12-Mar-2015 14:35
Nitrobenzene		U	0.0080	0.050	mg/L	10	12-Mar-2015 14:35
Pentachlorophenol		U	0.016	0.050	mg/L	10	12-Mar-2015 14:35
Pyridine		U	0.020	0.050	mg/L	10	12-Mar-2015 14:35
<i>Surr: 2,4,6-Tribromophenol</i>	98.1			39-153	%REC	10	12-Mar-2015 14:35
<i>Surr: 2-Fluorobiphenyl</i>	80.5			40-147	%REC	10	12-Mar-2015 14:35
<i>Surr: 2-Fluorophenol</i>	73.7			21-110	%REC	10	12-Mar-2015 14:35
<i>Surr: 4-Terphenyl-d14</i>	111			39-141	%REC	10	12-Mar-2015 14:35
<i>Surr: Nitrobenzene-d5</i>	60.0			37-140	%REC	10	12-Mar-2015 14:35
<i>Surr: Phenol-d6</i>	89.8			11-110	%REC	10	12-Mar-2015 14:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-01 Heated & Agitated Frac Tank  
 Collection Date: 05-Mar-2015 09:15

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-02  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3010A / 11-Mar-2015		Analyst: JDE
Arsenic	U		0.0100	0.0500	mg/L	1	12-Mar-2015 01:24
<b>Barium</b>	<b>2.59</b>		<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	12-Mar-2015 01:24
Cadmium	U		0.00800	0.0500	mg/L	1	12-Mar-2015 01:24
Chromium	U		0.0100	0.0500	mg/L	1	12-Mar-2015 01:24
<b>Lead</b>	<b>0.0147</b>	J	<b>0.00700</b>	<b>0.0500</b>	<b>mg/L</b>	1	12-Mar-2015 01:24
Selenium	U		0.0100	0.0500	mg/L	1	12-Mar-2015 01:24
Silver	U		0.00800	0.0500	mg/L	1	12-Mar-2015 01:24
<b>BURN RATE BY METHOD SW1030</b>		<b>Method:SW1030</b>					Analyst: KAH
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	12-Mar-2015 15:50
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW7470 / 11-Mar-2015		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	11-Mar-2015 16:10
<b>PH SOIL BY SW9045D</b>		<b>Method:SW9045B</b>					Analyst: JHD
<b>pH</b>	<b>6.01</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	09-Mar-2015 15:10
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide	See Attached		100		mg/Kg	1	10-Mar-2015 16:30
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide	See Attached		100		mg/Kg	1	10-Mar-2015 15:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-02 Dissolved Air Flotation Unit  
 Collection Date: 05-Mar-2015 09:45

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-03  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP VOLATILES</b>		<b>Method:SW1311/8260B</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW1311 / 09-Mar-2015		Analyst: PC
1,1-Dichloroethene	U		0.010	0.10	mg/L	20	11-Mar-2015 12:56
1,2-Dichloroethane	U		0.010	0.10	mg/L	20	11-Mar-2015 12:56
1,4-Dichlorobenzene	U		0.012	0.10	mg/L	20	11-Mar-2015 12:56
<b>2-Butanone</b>	<b>0.070</b>	J	<b>0.020</b>	<b>0.20</b>	<b>mg/L</b>	20	11-Mar-2015 12:56
<b>Benzene</b>	<b>1.2</b>		<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:56
Carbon tetrachloride	U		0.012	0.10	mg/L	20	11-Mar-2015 12:56
Chlorobenzene	U		0.0080	0.10	mg/L	20	11-Mar-2015 12:56
Chloroform	U		0.012	0.10	mg/L	20	11-Mar-2015 12:56
<b>Tetrachloroethene</b>	<b>0.027</b>	J	<b>0.012</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:56
<b>Trichloroethene</b>	<b>0.055</b>	J	<b>0.010</b>	<b>0.10</b>	<b>mg/L</b>	20	11-Mar-2015 12:56
Vinyl chloride	U		0.0080	0.040	mg/L	20	11-Mar-2015 12:56
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>90.6</i>			<i>70-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:56</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>97.4</i>			<i>72-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:56</i>
<i>Surr: Dibromofluoromethane</i>	<i>94.3</i>			<i>71-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:56</i>
<i>Surr: Toluene-d8</i>	<i>94.6</i>			<i>75-125</i>	<i>%REC</i>	<i>20</i>	<i>11-Mar-2015 12:56</i>
<b>TCLP SEMIVOLATILES</b>		<b>Method:SW1311/8270</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3510 / 11-Mar-2015		Analyst: ACN
2,4,5-Trichlorophenol	U		0.0090	0.050	mg/L	10	11-Mar-2015 19:39
2,4,6-Trichlorophenol	U		0.014	0.050	mg/L	10	11-Mar-2015 19:39
2,4-Dinitrotoluene	U		0.010	0.050	mg/L	10	11-Mar-2015 19:39
<b>Cresols, Total</b>	<b>0.52</b>		<b>0.020</b>	<b>0.15</b>	<b>mg/L</b>	10	11-Mar-2015 19:39
Hexachlorobenzene	U		0.011	0.050	mg/L	10	11-Mar-2015 19:39
Hexachlorobutadiene	U		0.011	0.050	mg/L	10	11-Mar-2015 19:39
Hexachloroethane	U		0.010	0.050	mg/L	10	11-Mar-2015 19:39
Nitrobenzene	U		0.0080	0.050	mg/L	10	11-Mar-2015 19:39
Pentachlorophenol	U		0.016	0.050	mg/L	10	11-Mar-2015 19:39
Pyridine	U		0.020	0.050	mg/L	10	11-Mar-2015 19:39
<i>Surr: 2,4,6-Tribromophenol</i>	<i>78.5</i>			<i>39-153</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>87.4</i>			<i>40-147</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>
<i>Surr: 2-Fluorophenol</i>	<i>72.0</i>			<i>21-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>79.9</i>			<i>39-141</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>
<i>Surr: Nitrobenzene-d5</i>	<i>80.1</i>			<i>37-140</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>
<i>Surr: Phenol-d6</i>	<i>81.7</i>			<i>11-110</i>	<i>%REC</i>	<i>10</i>	<i>11-Mar-2015 19:39</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: USOR-EQ-02 Dissolved Air Flotation Unit  
 Collection Date: 05-Mar-2015 09:45

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-03  
 Matrix:Solid

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>TCLP METALS BY SW6020A</b>		<b>Method:SW1311/6020</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW3010A / 11-Mar-2015		Analyst: JDE
Arsenic	U		0.0100	0.0500	mg/L	1	12-Mar-2015 01:29
<b>Barium</b>	<b>0.294</b>		<b>0.00900</b>	<b>0.200</b>	<b>mg/L</b>	1	12-Mar-2015 01:29
Cadmium	U		0.00800	0.0500	mg/L	1	12-Mar-2015 01:29
<b>Chromium</b>	<b>0.0148</b>	J	<b>0.0100</b>	<b>0.0500</b>	<b>mg/L</b>	1	12-Mar-2015 01:29
Lead	U		0.00700	0.0500	mg/L	1	12-Mar-2015 01:29
Selenium	U		0.0100	0.0500	mg/L	1	12-Mar-2015 01:29
Silver	U		0.00800	0.0500	mg/L	1	12-Mar-2015 01:29
<b>BURN RATE BY METHOD SW1030</b>		<b>Method:SW1030</b>					Analyst: KAH
Ignitability, Solid	Negative		0	0	Burn Rate, mm/sec	1	12-Mar-2015 15:50
<b>TCLP MERCURY BY SW7470A</b>		<b>Method:SW7470</b>		Leache:SW1311 / 09-Mar-2015	Prep:SW7470 / 11-Mar-2015		Analyst: OFO
Mercury	U		0.0000420	0.000200	mg/L	1	11-Mar-2015 16:11
<b>PH SOIL BY SW9045D</b>		<b>Method:SW9045B</b>					Analyst: JHD
pH	<b>6.63</b>	H	<b>0.100</b>	<b>0.100</b>	<b>pH Units</b>	1	09-Mar-2015 15:10
<b>REACTIVE CYANIDE</b>		<b>Method:SW7.3.3.2</b>					Analyst: SUB
Reactive Cyanide	See Attached		100		mg/Kg	1	10-Mar-2015 16:30
<b>REACTIVE SULFIDE</b>		<b>Method:SW7.3.4.2</b>					Analyst: SUB
Reactive Sulfide	See Attached		100		mg/Kg	1	10-Mar-2015 15:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

Client: Effective Environmental Inc.  
 Project: USOR - Equ Assesment and Sampling 8181  
 Sample ID: Trip Blank 030215-13  
 Collection Date: 05-Mar-2015 00:00

**ANALYTICAL REPORT**  
 WorkOrder:HS15030223  
 Lab ID:HS15030223-04  
 Matrix:Water

ANALYSES	RESULT	QUAL	MDL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>LOW LEVEL VOLATILES BY SW8260C</b>							Analyst: PC
<b>Method:SW8260</b>							
1,1-Dichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
1,2-Dichloroethane	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
1,4-Dichlorobenzene	U		0.00040	0.0010	mg/L	1	10-Mar-2015 02:45
2-Butanone	U		0.00050	0.0020	mg/L	1	10-Mar-2015 02:45
Benzene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
Carbon tetrachloride	U		0.00050	0.0010	mg/L	1	10-Mar-2015 02:45
Chlorobenzene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 02:45
Chloroform	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
Tetrachloroethene	U		0.00030	0.0010	mg/L	1	10-Mar-2015 02:45
Trichloroethene	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
Vinyl chloride	U		0.00020	0.0010	mg/L	1	10-Mar-2015 02:45
Surr: 1,2-Dichloroethane-d4	114			71-125	%REC	1	10-Mar-2015 02:45
Surr: 4-Bromofluorobenzene	108			70-125	%REC	1	10-Mar-2015 02:45
Surr: Dibromofluoromethane	112			74-125	%REC	1	10-Mar-2015 02:45
Surr: Toluene-d8	121			75-125	%REC	1	10-Mar-2015 02:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision:1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> 91289		<b>Test Name :</b> TCLP METALS BY SW6020A			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25	09 Mar 2015 15:11	11 Mar 2015 11:40	12 Mar 2015 01:19	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15	09 Mar 2015 15:11	11 Mar 2015 11:40	12 Mar 2015 01:24	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45	09 Mar 2015 15:11	11 Mar 2015 11:40	12 Mar 2015 01:29	1
<b>Batch ID</b> 91298		<b>Test Name :</b> TCLP MERCURY BY SW7470A			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 16:04	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 16:10	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45	11 Mar 2015 10:04	11 Mar 2015 10:04	11 Mar 2015 16:11	1
<b>Batch ID</b> 91303		<b>Test Name :</b> TCLP SEMIVOLATILES			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25	09 Mar 2015 14:58	11 Mar 2015 11:17	12 Mar 2015 13:04	10
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15	09 Mar 2015 14:58	11 Mar 2015 11:17	12 Mar 2015 14:35	10
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45	09 Mar 2015 14:58	11 Mar 2015 11:17	11 Mar 2015 19:39	10
<b>Batch ID</b> R250802		<b>Test Name :</b> PH SOIL BY SW9045D			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			09 Mar 2015 15:10	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			09 Mar 2015 15:10	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			09 Mar 2015 15:10	1
<b>Batch ID</b> R250808		<b>Test Name :</b> LOW LEVEL VOLATILES BY SW8260C			<b>Matrix:</b> Water	
HS15030223-04	Trip Blank 030215-13	05 Mar 2015 00:00			10 Mar 2015 02:45	1
<b>Batch ID</b> R250883		<b>Test Name :</b> REACTIVE CYANIDE			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			10 Mar 2015 16:30	1
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			10 Mar 2015 16:30	1
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			10 Mar 2015 15:30	1
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			10 Mar 2015 15:30	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			10 Mar 2015 16:30	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			10 Mar 2015 16:30	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			10 Mar 2015 15:30	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			10 Mar 2015 15:30	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			10 Mar 2015 16:30	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			10 Mar 2015 16:30	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			10 Mar 2015 15:30	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			10 Mar 2015 15:30	1

Revision:1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
<b>Batch ID</b> R250959		<b>Test Name :</b> TCLP VOLATILES			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25	09 Mar 2015 17:22	09 Mar 2015 17:22	11 Mar 2015 12:08	20
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15	09 Mar 2015 17:22	09 Mar 2015 17:22	11 Mar 2015 12:32	20
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45	09 Mar 2015 17:22	09 Mar 2015 17:22	11 Mar 2015 12:56	20
<b>Batch ID</b> R250986		<b>Test Name :</b> BURN RATE BY METHOD SW1030			<b>Matrix:</b> Solid	
HS15030223-01	USOR-EQ-14-ICP Tank B	05 Mar 2015 10:25			12 Mar 2015 15:50	1
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	05 Mar 2015 09:15			12 Mar 2015 15:50	1
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	05 Mar 2015 09:45			12 Mar 2015 15:50	1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

<b>Batch ID:</b> 91289	<b>Instrument:</b> ICPMS04	<b>Method:</b> SW1311/6020								
<b>MBLK</b>	Sample ID: <b>MBLKT1-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:34</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211211</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.0500								
Barium	0.03256	0.200								J
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

<b>MBLK</b>	Sample ID: <b>MBLK-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:39</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211212</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	U	0.00500								
Barium	U	0.0200								
Cadmium	U	0.00500								
Chromium	U	0.00500								
Lead	U	0.00500								
Selenium	U	0.00500								
Silver	U	0.00500								

<b>LCS</b>	Sample ID: <b>MLCS-91289</b>	Units: <b>mg/L</b>	Analysis Date: <b>11-Mar-2015 22:44</b>							
Client ID:	Run ID: <b>ICPMS04_250896</b>	SeqNo: <b>3211213</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Arsenic	0.04865	0.00500	0.05	0	97.3	80 - 120				
Barium	0.04923	0.0200	0.05	0	98.5	80 - 120				
Cadmium	0.0503	0.00500	0.05	0	101	80 - 120				
Chromium	0.04814	0.00500	0.05	0	96.3	80 - 120				
Lead	0.04793	0.00500	0.05	0	95.9	80 - 120				
Selenium	0.04882	0.00500	0.05	0	97.6	80 - 120				
Silver	0.05031	0.00500	0.05	0	101	80 - 120				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** 91289      **Instrument:** ICPMS04      **Method:** SW1311/6020

MS		Sample ID: HS15030206-01MS			Units: mg/L		Analysis Date: 11-Mar-2015 23:03			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211217		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.526	0.0500	0.5	0.01794	102	80 - 120				
Barium	1.102	0.200	0.5	0.6276	94.9	80 - 120				
Cadmium	0.5072	0.0500	0.5	0.00033	101	80 - 120				
Chromium	0.4891	0.0500	0.5	0.00523	96.8	80 - 120				
Lead	0.4826	0.0500	0.5	0.00221	96.1	80 - 120				
Selenium	0.5412	0.0500	0.5	0.01184	106	80 - 120				
Silver	0.4844	0.0500	0.5	-0.00047	97.0	80 - 120				

MSD		Sample ID: HS15030206-01MSD			Units: mg/L		Analysis Date: 11-Mar-2015 23:08			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211218		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.5094	0.0500	0.5	0.01794	98.3	80 - 120	0.526	3.21	20	
Barium	1.087	0.200	0.5	0.6276	91.9	80 - 120	1.102	1.37	20	
Cadmium	0.5066	0.0500	0.5	0.00033	101	80 - 120	0.5072	0.118	20	
Chromium	0.4727	0.0500	0.5	0.00523	93.5	80 - 120	0.4891	3.41	20	
Lead	0.4773	0.0500	0.5	0.00221	95.0	80 - 120	0.4826	1.11	20	
Selenium	0.5256	0.0500	0.5	0.01184	103	80 - 120	0.5412	2.93	20	
Silver	0.4767	0.0500	0.5	-0.00047	95.4	80 - 120	0.4844	1.61	20	

DUP		Sample ID: HS15030206-01DUP			Units: mg/L		Analysis Date: 11-Mar-2015 22:53			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211215		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.01775	0.0500					0.01794	0	25	J
Barium	0.5902	0.200					0.6276	6.15	25	
Cadmium	U	0.0500					0.00033	0	25	
Chromium	U	0.0500					0.00523	0	25	
Lead	U	0.0500					0.00221	0	25	
Selenium	0.01241	0.0500					0.01184	0	25	J
Silver	U	0.0500					-0.00047	0	25	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** 91289      **Instrument:** ICPMS04      **Method:** SW1311/6020

PDS		Sample ID: HS15030206-01BS			Units: mg/L		Analysis Date: 11-Mar-2015 23:12			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211219		PrepDate: 11-Mar-2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.9837	0.0500	1	0.01794	96.6	75 - 125				
Barium	1.568	0.200	1	0.6276	94.1	75 - 125				
Cadmium	0.9826	0.0500	1	0.00033	98.2	75 - 125				
Chromium	0.9375	0.0500	1	0.00523	93.2	75 - 125				
Lead	0.9756	0.0500	1	0.00221	97.3	75 - 125				
Selenium	1.023	0.0500	1	0.01184	101	75 - 125				
Silver	0.9523	0.0500	1	-0.00047	95.3	75 - 125				

SD		Sample ID: HS15030206-01 DIL SX			Units: mg/L		Analysis Date: 11-Mar-2015 22:58			
Client ID:		Run ID: ICPMS04_250896			SeqNo: 3211216		PrepDate: 11-Mar-2015		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.250					0.01794		0	10
Barium	0.6024	1.00					0.6276		0	10 J
Cadmium	U	0.250					0.00033		0	10
Chromium	U	0.250					0.00523		0	10
Lead	U	0.250					0.00221		0	10
Selenium	U	0.250					0.01184		0	10
Silver	U	0.250					-0.00047		0	10

The following samples were analyzed in this batch: HS15030223-01      HS15030223-02      HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: 91298		Instrument: HG03			Method: SW7470					
<b>MBLK</b>	Sample ID: <b>GBLKW1-031115</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:19</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210687</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								
<b>MBLK</b>	Sample ID: <b>GBLKT1-031015</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:33</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210695</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200								
<b>LCS</b>	Sample ID: <b>GLCSW1-031115</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:21</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210688</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00517	0.000200	0.005	0	103	80 - 120				
<b>MS</b>	Sample ID: <b>HS15030213-01MS</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:26</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210691</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00504	0.000200	0.005	0.000013	101	75 - 125				
<b>MSD</b>	Sample ID: <b>HS15030213-01MSD</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:28</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210692</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00532	0.000200	0.005	0.000013	106	75 - 125	0.00504	5.41	20	
<b>DUP</b>	Sample ID: <b>HS15030213-01DUP</b>	Units: <b>mg/L</b>			Analysis Date: <b>11-Mar-2015 13:24</b>					
Client ID:	Run ID: <b>HG03_250932</b>	SeqNo: <b>3210690</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.000200					0.000013	0	20	

The following samples were analyzed in this batch: HS15030223-01 HS15030223-02 HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

<b>Batch ID:</b> 91303	<b>Instrument:</b> SV-5	<b>Method:</b> SW1311/8270								
<b>MBLK</b>	Sample ID: <b>MBLK-91303</b>	Units: <b>ug/L</b>	Analysis Date: <b>11-Mar-2015 15:37</b>							
Client ID:	Run ID: <b>SV-5_250960</b>	SeqNo: <b>3211369</b>	PrepDate: <b>11-Mar-2015</b> DF: <b>1</b>							
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Cresols, Total	U	15								
Hexachlorobenzene	U	5.0								
Hexachlorobutadiene	U	5.0								
Hexachloroethane	U	5.0								
Nitrobenzene	U	5.0								
Pentachlorophenol	U	5.0								
Pyridine	U	5.0								
Surr: 2,4,6-Tribromophenol	74.14	5.0	100	0	74.1	39 - 153				
Surr: 2-Fluorobiphenyl	71.5	5.0	100	0	71.5	40 - 147				
Surr: 2-Fluorophenol	73.72	5.0	100	0	73.7	21 - 110				
Surr: 4-Terphenyl-d14	76.74	5.0	100	0	76.7	39 - 141				
Surr: Nitrobenzene-d5	73.91	5.0	100	0	73.9	37 - 140				
Surr: Phenol-d6	86.3	5.0	100	0	86.3	11 - 110				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: 91303		Instrument: SV-5		Method: SW1311/8270						
<b>LCS</b>	Sample ID: <b>LCS-91303</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 16:22</b>					
Client ID:	Run ID: <b>SV-5_250960</b>	SeqNo: <b>3211370</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
2,4,5-Trichlorophenol	95.47	5.0	100	0	95.5	55 - 120				
2,4,6-Trichlorophenol	95.13	5.0	100	0	95.1	55 - 120				
2,4-Dinitrotoluene	48.24	5.0	50	0	96.5	55 - 125				
Cresols, Total	221.4	15	250	0	88.6	40 - 120				
Hexachlorobenzene	45.05	5.0	50	0	90.1	55 - 120				
Hexachlorobutadiene	39.2	5.0	50	0	78.4	55 - 120				
Hexachloroethane	40.41	5.0	50	0	80.8	55 - 120				
Nitrobenzene	42.03	5.0	50	0	84.1	55 - 120				
Pentachlorophenol	86.34	5.0	100	0	86.3	50 - 135				
Pyridine	31.99	5.0	50	0	64.0	30 - 120				
<i>Surr: 2,4,6-Tribromophenol</i>	<i>101.9</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>39 - 153</i>				
<i>Surr: 2-Fluorobiphenyl</i>	<i>88.07</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.1</i>	<i>40 - 147</i>				
<i>Surr: 2-Fluorophenol</i>	<i>88.83</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>88.8</i>	<i>20 - 110</i>				
<i>Surr: 4-Terphenyl-d14</i>	<i>81.34</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>81.3</i>	<i>39 - 141</i>				
<i>Surr: Nitrobenzene-d5</i>	<i>79.55</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>79.5</i>	<i>37 - 140</i>				
<i>Surr: Phenol-d6</i>	<i>93.19</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>93.2</i>	<i>11 - 110</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: 91303		Instrument: SV-5		Method: SW1311/8270						
<b>LCSD</b>	Sample ID: <b>LCSD-91303</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 17:33</b>					
Client ID:	Run ID: <b>SV-5_250960</b>	SeqNo: <b>3211371</b>		PrepDate: <b>11-Mar-2015</b>		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	90.62	5.0	100	0	90.6	55 - 120	95.47	5.21	25	
2,4,6-Trichlorophenol	97.48	5.0	100	0	97.5	55 - 120	95.13	2.44	25	
2,4-Dinitrotoluene	37.73	5.0	50	0	75.5	55 - 125	48.24	24.5	25	
Cresols, Total	208.8	15	250	0	83.5	40 - 120	221.4	5.87	25	
Hexachlorobenzene	45.93	5.0	50	0	91.9	55 - 120	45.05	1.93	25	
Hexachlorobutadiene	39.63	5.0	50	0	79.3	55 - 120	39.2	1.07	25	
Hexachloroethane	39.39	5.0	50	0	78.8	55 - 120	40.41	2.54	25	
Nitrobenzene	42.9	5.0	50	0	85.8	55 - 120	42.03	2.06	25	
Pentachlorophenol	91.3	5.0	100	0	91.3	50 - 135	86.34	5.58	25	
Pyridine	31.1	5.0	50	0	62.2	30 - 120	31.99	2.82	25	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>72.04</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>72.0</i>	<i>39 - 153</i>	<i>101.9</i>	<i>34.3</i>	<i>25</i>	<i>R</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>83.07</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.1</i>	<i>40 - 147</i>	<i>88.07</i>	<i>5.84</i>	<i>25</i>	
<i>Surr: 2-Fluorophenol</i>	<i>76.12</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>76.1</i>	<i>21 - 110</i>	<i>88.83</i>	<i>15.4</i>	<i>25</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>55.94</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>55.9</i>	<i>39 - 141</i>	<i>81.34</i>	<i>37</i>	<i>25</i>	<i>R</i>
<i>Surr: Nitrobenzene-d5</i>	<i>83.92</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>83.9</i>	<i>37 - 140</i>	<i>79.55</i>	<i>5.35</i>	<i>25</i>	
<i>Surr: Phenol-d6</i>	<i>89.17</i>	<i>5.0</i>	<i>100</i>	<i>0</i>	<i>89.2</i>	<i>11 - 110</i>	<i>93.19</i>	<i>4.42</i>	<i>25</i>	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

<b>Batch ID:</b> 91303	<b>Instrument:</b> SV-5	<b>Method:</b> SW1311/8270
<b>MS</b>	<b>Sample ID:</b> HS15030192-01MS	<b>Units:</b> ug/L
<b>Client ID:</b>	<b>Run ID:</b> SV-5_250960	<b>SeqNo:</b> 3211555
		<b>PrepDate:</b> 11-Mar-2015
		<b>DF:</b> 1
<b>Analyte</b>	<b>Result</b>	<b>PQL</b>
		<b>SPK Val</b>
		<b>SPK Ref Value</b>
		<b>%REC</b>
		<b>Control Limit</b>
		<b>RPD Ref Value</b>
		<b>%RPD</b>
		<b>RPD Limit Qual</b>

2,4,5-Trichlorophenol	101	5.0	100	0	101	55 - 120
2,4,6-Trichlorophenol	106.8	5.0	100	0	107	55 - 120
2,4-Dinitrotoluene	42.69	5.0	50	0	85.4	55 - 125
Cresols, Total	213.7	15	250	0	85.5	40 - 120
Hexachlorobenzene	50.16	5.0	50	0	100	55 - 120
Hexachlorobutadiene	39.9	5.0	50	0	79.8	55 - 120
Hexachloroethane	37.73	5.0	50	0	75.5	55 - 120
Nitrobenzene	41.92	5.0	50	0	83.8	55 - 120
Pentachlorophenol	96.31	5.0	100	0	96.3	50 - 135
Pyridine	40.35	5.0	50	0	80.7	30 - 120
Surr: 2,4,6-Tribromophenol	109.6	5.0	100	0	110	39 - 153
Surr: 2-Fluorobiphenyl	94.37	5.0	100	0	94.4	40 - 147
Surr: 2-Fluorophenol	97.01	5.0	100	0	97.0	21 - 110
Surr: 4-Terphenyl-d14	77.69	5.0	100	0	77.7	39 - 141
Surr: Nitrobenzene-d5	81.87	5.0	100	0	81.9	37 - 140
Surr: Phenol-d6	99.69	5.0	100	0	99.7	11 - 110

The following samples were analyzed in this batch: HS15030223-01 HS15030223-02 HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250808      **Instrument:** VOA4      **Method:** SW8260

MBLK	Sample ID: VBLKW-150309	Units: ug/L		Analysis Date: 09-Mar-2015 20:53						
Client ID:	Run ID: VOA4_250808	SeqNo: 3208786	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,4-Dichlorobenzene	U	1.0								
2-Butanone	U	2.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	1.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	50.65	1.0	50	0	101	71 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	47.16	1.0	50	0	94.3	70 - 125				
<i>Surr: Dibromofluoromethane</i>	50.7	1.0	50	0	101	74 - 125				
<i>Surr: Toluene-d8</i>	52.38	1.0	50	0	105	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: R250808		Instrument: VOA4		Method: SW8260						
<b>LCS</b>	Sample ID: <b>VLCSW-150309</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 20:03</b>					
Client ID:	Run ID: <b>VOA4_250808</b>	SeqNo: <b>3208785</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	51.51	1.0	50	0	103	75 - 130				
1,2-Dichloroethane	55.12	1.0	50	0	110	76 - 120				
1,4-Dichlorobenzene	50.44	1.0	50	0	101	80 - 120				
2-Butanone	112.2	2.0	100	0	112	60 - 140				
Benzene	53.23	1.0	50	0	106	80 - 120				
Carbon tetrachloride	46.23	1.0	50	0	92.5	75 - 125				
Chlorobenzene	52.56	1.0	50	0	105	80 - 120				
Chloroform	53.76	1.0	50	0	108	70 - 130				
Tetrachloroethene	49.93	1.0	50	0	99.9	75 - 130				
Trichloroethene	51.83	1.0	50	0	104	71 - 125				
Vinyl chloride	55.63	1.0	50	0	111	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>50.68</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.5</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>51.85</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>104</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>51.58</i>	<i>1.0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: R250808		Instrument: VOA4		Method: SW8260						
<b>MS</b>	Sample ID: <b>HS15030194-13MS</b>	Units: <b>ug/L</b>			Analysis Date: <b>09-Mar-2015 23:24</b>					
Client ID:	Run ID: <b>VOA4_250808</b>	SeqNo: <b>3208789</b>		PrepDate:		DF: <b>5</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	249.3	5.0	250	0	99.7	75 - 130				
1,2-Dichloroethane	256.5	5.0	250	0	103	76 - 120				
1,4-Dichlorobenzene	222.2	5.0	250	0	88.9	80 - 120				
2-Butanone	557.6	10	500	0	112	60 - 140				
Benzene	255.3	5.0	250	0	102	80 - 120				
Carbon tetrachloride	226.2	5.0	250	0	90.5	79 - 120				
Chlorobenzene	234	5.0	250	0	93.6	80 - 120				
Chloroform	248.6	5.0	250	0	99.4	70 - 130				
Tetrachloroethene	231.3	5.0	250	0	92.5	75 - 130				
Trichloroethene	242.5	5.0	250	0	97.0	71 - 125				
Vinyl chloride	245.8	5.0	250	0	98.3	70 - 135				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>258.6</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>103</i>	<i>71 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>253.7</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>101</i>	<i>70 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>261.4</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>105</i>	<i>74 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>267.8</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>107</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250808      **Instrument:** VOA4      **Method:** SW8260

MSD		Sample ID: HS15030194-13MSD			Units: ug/L		Analysis Date: 09-Mar-2015 23:49			
Client ID:		Run ID: VOA4_250808			SeqNo: 3208790		PrepDate:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	279.3	5.0	250	0	112	75 - 130	249.3	11.3	20	
1,2-Dichloroethane	293.7	5.0	250	0	117	76 - 120	256.5	13.5	20	
1,4-Dichlorobenzene	256.7	5.0	250	0	103	80 - 120	222.2	14.4	20	
2-Butanone	665.8	10	500	0	133	60 - 140	557.6	17.7	20	
Benzene	286.7	5.0	250	0	115	80 - 120	255.3	11.6	20	
Carbon tetrachloride	253.7	5.0	250	0	101	75 - 125	226.2	11.5	20	
Chlorobenzene	271.4	5.0	250	0	109	80 - 120	234	14.8	20	
Chloroform	284.8	5.0	250	0	114	70 - 130	248.6	13.6	20	
Tetrachloroethene	268	5.0	250	0	107	75 - 130	231.3	14.7	20	
Trichloroethene	274.1	5.0	250	0	110	71 - 125	242.5	12.2	20	
Vinyl chloride	282.4	5.0	250	0	113	70 - 135	245.8	13.9	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>287.1</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>115</i>	<i>71 - 125</i>	<i>258.6</i>	<i>10.5</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>293.6</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>117</i>	<i>70 - 125</i>	<i>253.7</i>	<i>14.6</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>286</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>114</i>	<i>74 - 125</i>	<i>261.4</i>	<i>8.97</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>295.8</i>	<i>5.0</i>	<i>250</i>	<i>0</i>	<i>118</i>	<i>75 - 125</i>	<i>267.8</i>	<i>9.94</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030223-04

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250959      **Instrument:** VOA6      **Method:** SW1311/8260B

MBLK	Sample ID: VBLKW-150311	Units: ug/L			Analysis Date: 11-Mar-2015 11:20					
Client ID:	Run ID: VOA6_250959	SeqNo: 3211328	PrepDate:	DF: 1						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	5.0								
1,2-Dichloroethane	U	5.0								
1,4-Dichlorobenzene	U	5.0								
2-Butanone	U	10								
Benzene	U	5.0								
Carbon tetrachloride	U	5.0								
Chlorobenzene	U	5.0								
Chloroform	U	5.0								
Tetrachloroethene	U	5.0								
Trichloroethene	U	5.0								
Vinyl chloride	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	46.69	5.0	50	0	93.4	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	46.69	5.0	50	0	93.4	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	48.57	5.0	50	0	97.1	71.2 - 125				
<i>Surr: Toluene-d8</i>	49.34	5.0	50	0	98.7	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250959      **Instrument:** VOA6      **Method:** SW1311/8260B

MBLK	Sample ID: MBLKV1-150310	Units: ug/L		Analysis Date: 11-Mar-2015 15:21						
Client ID:	Run ID: VOA6_250959	SeqNo: 3211336	PrepDate:	DF: 20						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	100								
1,2-Dichloroethane	U	100								
1,4-Dichlorobenzene	U	100								
2-Butanone	U	200								
Benzene	U	100								
Carbon tetrachloride	U	100								
Chlorobenzene	U	100								
Chloroform	U	100								
Tetrachloroethene	U	100								
Trichloroethene	U	100								
Vinyl chloride	U	40								
<i>Surr: 1,2-Dichloroethane-d4</i>	916.7	100	1000	0	91.7	70 - 125				
<i>Surr: 4-Bromofluorobenzene</i>	950	100	1000	0	95.0	72.4 - 125				
<i>Surr: Dibromofluoromethane</i>	969.5	100	1000	0	97.0	71.2 - 125				
<i>Surr: Toluene-d8</i>	993.8	100	1000	0	99.4	75 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
<b>LCS</b>	Sample ID: <b>VLCSW-150311</b>	Units: <b>ug/L</b>			Analysis Date: <b>11-Mar-2015 10:32</b>					
Client ID:	Run ID: <b>VOA6_250959</b>	SeqNo: <b>3211327</b>		PrepDate:		DF: <b>1</b>				
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	45.38	5.0	50	0	90.8	73 - 124				
1,2-Dichloroethane	46.37	5.0	50	0	92.7	76 - 120				
1,4-Dichlorobenzene	49.6	5.0	50	0	99.2	70 - 130				
2-Butanone	89.77	10	100	0	89.8	70 - 130				
Benzene	48.91	5.0	50	0	97.8	70 - 128				
Carbon tetrachloride	50.09	5.0	50	0	100	70 - 130				
Chlorobenzene	50.59	5.0	50	0	101	72 - 127				
Chloroform	47.54	5.0	50	0	95.1	70 - 130				
Tetrachloroethene	50.41	5.0	50	0	101	70 - 130				
Trichloroethene	52.34	5.0	50	0	105	72 - 129				
Vinyl chloride	44.18	2.0	50	0	88.4	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>45.42</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>90.8</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.76</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>102</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.09</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.2</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>49</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.0</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

Batch ID: R250959		Instrument: VOA6		Method: SW1311/8260B						
MS	Sample ID: HS15030332-02MS	Units: ug/L			Analysis Date: 11-Mar-2015 14:09					
Client ID:	Run ID: VOA6_250959	SeqNo: 3211334		PrepDate:			DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
1,1-Dichloroethene	43.43	5.0	50	0	86.9	73 - 124				
1,2-Dichloroethane	45.16	5.0	50	0	90.3	76 - 120				
1,4-Dichlorobenzene	44.8	5.0	50	0	89.6	70 - 130				
2-Butanone	90.12	10	100	0	90.1	70 - 130				
Benzene	46.37	5.0	50	0	92.7	70 - 128				
Carbon tetrachloride	45.77	5.0	50	0	91.5	70 - 130				
Chlorobenzene	47.57	5.0	50	0	95.1	72 - 127				
Chloroform	48.11	5.0	50	0	96.2	70 - 130				
Tetrachloroethene	45.36	5.0	50	0	90.7	70 - 130				
Trichloroethene	48.33	5.0	50	0	96.7	72 - 129				
Vinyl chloride	46.32	2.0	50	0	92.6	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.64</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>93.3</i>	<i>70 - 125</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.37</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>				
<i>Surr: Dibromofluoromethane</i>	<i>49.3</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.6</i>	<i>71 - 125</i>				
<i>Surr: Toluene-d8</i>	<i>48.97</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>97.9</i>	<i>75 - 125</i>				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250959      **Instrument:** VOA6      **Method:** SW1311/8260B

MSD		Sample ID: HS15030332-02MSD			Units: ug/L		Analysis Date: 11-Mar-2015 14:33			
Client ID:		Run ID: VOA6_250959			SeqNo: 3211335		PrepDate:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	43.66	5.0	50	0	87.3	73 - 124	43.43	0.535	20	
1,2-Dichloroethane	48.99	5.0	50	0	98.0	76 - 120	45.16	8.12	20	
1,4-Dichlorobenzene	47.87	5.0	50	0	95.7	70 - 130	44.8	6.62	20	
2-Butanone	98.57	10	100	0	98.6	70 - 130	90.12	8.95	20	
Benzene	47.72	5.0	50	0	95.4	70 - 128	46.37	2.87	20	
Carbon tetrachloride	47.37	5.0	50	0	94.7	70 - 130	45.77	3.43	20	
Chlorobenzene	49.52	5.0	50	0	99.0	72 - 127	47.57	4.02	20	
Chloroform	47.94	5.0	50	0	95.9	70 - 130	48.11	0.366	20	
Tetrachloroethene	46.89	5.0	50	0	93.8	70 - 130	45.36	3.32	20	
Trichloroethene	50.3	5.0	50	0	101	72 - 129	48.33	3.99	20	
Vinyl chloride	44.58	2.0	50	0	89.2	70 - 130	46.32	3.83	20	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>46.39</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>92.8</i>	<i>70 - 125</i>	<i>46.64</i>	<i>0.533</i>	<i>20</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>50.62</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>101</i>	<i>72 - 125</i>	<i>50.37</i>	<i>0.495</i>	<i>20</i>	
<i>Surr: Dibromofluoromethane</i>	<i>49.27</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>71 - 125</i>	<i>49.3</i>	<i>0.0669</i>	<i>20</i>	
<i>Surr: Toluene-d8</i>	<i>49.27</i>	<i>5.0</i>	<i>50</i>	<i>0</i>	<i>98.5</i>	<i>75 - 125</i>	<i>48.97</i>	<i>0.606</i>	<i>20</i>	

The following samples were analyzed in this batch: HS15030223-01      HS15030223-02      HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250802      **Instrument:** WetChem\_HS      **Method:** SW9045B

<b>LCS</b>	Sample ID: <b>LCS-250802</b>	Units: <b>pH Units</b>			Analysis Date: <b>09-Mar-2015 15:10</b>				
Client ID:	Run ID: <b>WetChem_HS_250802</b>	SeqNo: <b>3208705</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	5.98	0.100	6	0	99.7	97 - 103			

<b>DUP</b>	Sample ID: <b>HS15030192-02DUP</b>	Units: <b>pH Units</b>			Analysis Date: <b>09-Mar-2015 15:10</b>				
Client ID:	Run ID: <b>WetChem_HS_250802</b>	SeqNo: <b>3208706</b>	PrepDate:	DF: <b>1</b>					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit Qual
pH	8.01	0.100					8.08	0.87	10

The following samples were analyzed in this batch: HS15030223-01      HS15030223-02      HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QC BATCH REPORT**

**Batch ID:** R250986      **Instrument:** WetChem\_HS      **Method:** SW1030

<b>DUP</b>	Sample ID: <b>HS15030331-01DUP</b>	Units: <b>Burn Rate, mm/sec</b>	Analysis Date: <b>12-Mar-2015 15:50</b>							
Client ID:	Run ID: <b>WetChem_HS_250986</b>	SeqNo: <b>3211840</b>	PrepDate:	DF: <b>1</b>						
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ignitability, Solid	Negative	0					0	0	25	

The following samples were analyzed in this batch: HS15030223-01      HS15030223-02      HS15030223-03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**WorkOrder:** HS15030223

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b>Unit Reported</b>	<b>Description</b>
Date	
mg/Kg	Milligrams per Kilogram
mg/L	Milligrams per Liter
no unit	
pH Units	

**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

<b>Agency</b>	<b>Number</b>	<b>Expire Date</b>
Arkansas	15-024-0	27-Mar-2016
California	2919	31-Jul-2016
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 2014-2015	31-Jul-2015
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2014/2015	30-Jun-2015
North Carolina	624 - 2015	31-Dec-2015
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2014-128	31-Aug-2015
Texas	T104704231-14-14	30-Apr-2015

**Client:** Effective Environmental Inc.  
**Project:** USOR - Equ Assesment and Sampling 8181  
**Work Order:** HS15030223

**SAMPLE TRACKING**

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS15030223-01	USOR-EQ-14-ICP Tank B	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-01	USOR-EQ-14-ICP Tank B	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-01	USOR-EQ-14-ICP Tank B	Login	3/6/2015 6:11:15 PM	RPG	Sub
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-02	USOR-EQ-01 Heated & Agitated Frac Tank	Login	3/6/2015 6:11:15 PM	RPG	Sub
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	Login	3/6/2015 6:11:15 PM	RPG	14A
HS15030223-03	USOR-EQ-02 Dissolved Air Flotation Unit	Login	3/6/2015 6:11:15 PM	RPG	Sub
HS15030223-04	Trip Blank 030215-13	Login	3/6/2015 6:50:50 PM	RPG	VW-3

Sample Receipt Checklist

Client Name: Effective Env-HOU  
 Work Order: HS15030223

Date/Time Received: **06-Mar-2015 13:26**  
 Received by: **PS**

Checklist completed by: Raegen Giga 6-Mar-2015 Reviewed by: Dane J. Wacasey 10-Mar-2015  
 eSignature Date eSignature Date

Matrices: **solid** Carrier name: **ALS Courier**

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Present
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No

Temperature(s)/Thermometer(s): 1.0c/1.0c c/u IR 1

Cooler(s)/Kit(s): 7165

Date/Time sample(s) sent to storage: 03/06/2015 18:25

Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted

Water - pH acceptable upon receipt? Yes  No  N/A

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes: **Sample bottle label: EQ-14 logged in per COC as EQ-03**

Client Contacted: Date Contacted: Person Contacted:

Contacted By: 0 Regarding:

Comments:

Corrective Action:



ALS Laboratory Group  
 10450 Stancliff Rd. #210  
 Houston, Texas 77099  
 (Tel) 281.530.5656  
 (Fax) 281.530.5887

# Chain of Custody Form

Page 1 of 1

## HS15030223

Effective Environmental Inc.  
 USOR - Equ. Assesment and Sampling



Customer Information		Project Information		
Purchase Order	FS-10054	Project Name	USOR-Equ. Assessment & Sampling	A: TCLP - VOCs
Work Order		Project Number	8181	B: TCLP - SVOCs
Company Name	Effective Environmental	Bill To Company	Effective Environmental	C: TCLP RCRA 8 Metals
Send Report To	Hiren Shah	Invoice Attn.	Hiren Shah	D: RCI
Address	9950 Chemical Road	Address	2515 S. Beltline Road	E: VOCs for trip blank
City/State/Zip	Pasadena, TX 77507	City/State/Zip	Mesquite, TX 75181	F:
Phone	281-842-0804	Phone	972-329-1200	G:
Fax	281-474-2580	Fax	972-329-1206	H:
e-Mail Address	hshah@eff-env.com	e-Mail Address	hshah@eff-env.com	I:
				J:

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	USOR-EQ-03 Light Blue Horizontal Cylinder	03/05/15	10:25 a.m.	Solids		4	X	X	X	X							
2	USOR-EQ-01 Heated & Agitated Frac Tank	03/05/15	9:15 a.m.	Solids		4	X	X	X	X							
3	USOR-EQ-02 Dissolved Air Flotation Unit	03/05/15	9:45 a.m.	Solids		4	X	X	X	X							
4	Trip Blank										X						
6																	
7																	
8																	
9																	
10																	
11																	
12																	

Sampler(s): Please Print & Sign Joe Carillo <i>Joe Carillo</i>		Shipment Method:		Required Turnaround Time: <input type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> Other _____ <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour			Results Due Date:	
Relinquished by: <i>Joe Carillo</i>	Date: 3/5/15	Time: 4:18 PM	Received by: <i>Hiren Shah</i>	Notes:				
Relinquished by: <i>Hiren Shah</i>	Date: 3/6/15	Time: 12:05 P.M.	Received by (Laboratory): <i>Vicki Blom</i>	Cooler Temp.	QC Package: (Check Box Below)			
Relinquished by: <i>Vicki Blom</i>	Date: 3/6/15	Time: 1:32P	Received by: <i>Vicki Blom</i>		<input type="checkbox"/> Level II: Standard QC	<input type="checkbox"/> TRRP-Checklist		
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5035					<input type="checkbox"/> Level III: Std QC + Raw Data	<input type="checkbox"/> TRRP Level IV		
					<input type="checkbox"/> Level IV: SW846 CLP-Like			
					Other: _____			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group. Copyright 2008 by ALS Laboratory Group

7165